

APPRAISAL REPORT Estimating

FAIR MARKET RENTAL VALUE OF GRAZING ON PUBLIC LANDS

Prepared for

U.S. FOREST SERVICE and BUREAU of LAND MANAGEMENT

VOLUME 1





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APPRAISAL REPORT

ESTIMATING FAIR MARKET RENTAL VALUE

OF PUBLIC RANGELANDS IN THE WESTERN UNITED STATES

ADMINISTERED BY

USDA-FOREST SERVICE

AND

USDI-BUREAU OF LAND MANAGEMENT

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NOTE: See page 282 of Volume 1 for information on how to obtain copies of this report and computer tapes and/or microfiche containing raw grazing rental transaction data.

 $[\]underline{1}/$ Annotations show location of grazing on public rangelands and the Transaction Data search areas.

GLOSSARY OF TERMS

ANIMAL UNIT

A cow with a nursing calf (less than 6 months of age) or a mature cow or horse or equivalent over 18 months of age. Other types of livestock may be identified at various decimal equivalents of one animal unit, (e.g., 1.32 or .20 etc).

AIM

The amount of forage required to support one animal unit for one month.

MASS APPRAISAL

Mass Appraising is defined in the Real Estate Appraisal Terminology Handbook as, "The process of valuing a universe of properties as of a given date, in a uniform order, utilizing standard methodology, employing a reference for data, and allowing for statistical testing." Revised Edition, 1982, Published for the American Institute of Real Estate Appraisers and Society of Real Estate Appraisers by; Ballinger Publishing Co. Cambridge, Mass. It is also defined as: "A method of appraising a large number of properties at one time by adopting techniques, and giving consideration to the appraisal process so that uniformity or equality of value may be achieved between all properties."

HDMO - HEAD MONTH

A pricing unit based on the price paid to graze one animal for one month.

MULTI-YEAR/MULTI AREA AVERAGES, ETC.

Numerous tables throughout the body of the report contain average prices, acreages, high and low prices, and number of leases for individual years for the specific area and/or animal type being discussed. These tables also contain average prices, acreages, etc. for multi-year periods. The entries for the multi-year periods are not to be interpreted as totals or an average of the average prices for the individual years. entries have been calculated multi-year independent of the individual years. Using totally artificial numbers, the process can be illustrated as follows:

	ENTR	Y .	1977	ACRES	ENT	RY	1978	ACRES
	1	\$2	28.00	100	1		\$17.00	2,000
	2		22.00	200	2		\$14.00	1,900
	3		19.00	300	3		\$14.00	1,800
		Al	∞ve a	re "clip	ped"	in	70% Bas	e.
	4 5		16.00 15.00	40 0 500	4 5		\$13.00 \$13.00	1,700
	6		14.00	600	6		\$13.00	1,600 1,500
	7	\$	14.00	700	7		\$12.00	1,400
	8		14.00	800	8		\$12.00	1,300
	9. 10		13.00	900 1,000	9 10		\$11.00 \$10.00	1,200 1,100
	11	\$3	12.00	1,100	11		\$10.00	1,000
	12		11.00	1,200	12		\$ 9.00	900
	13 14		10.00	1,300 1,400	13 14		\$ 9.00 \$ 8.00	800 700
	15		10.00	1,500	15		\$ 7.00	600
	16		10.00	1,600	16		\$ 7.00	500
	17	\$	9.00	1,700	17		\$ 6.00	400
		Be	elow a	re "clip	ped"	in	70% Bas	e.
	18		9.00	1,800	18		\$ 6.00	300
	19 20	\$ \$	8.00 7.00	1,900 2,000	19 20		\$ 5.00 \$ 4.00	200 100
		•		·			Ф 4.00	100
	TOL			ansactio	115		1070	
Entri	26		20				<u>1978</u> 20	
Acres		2]	L,000				21,000	
High			28.00				\$17.00	
Low	_		7.00 L2.00				\$ 4.00	
Media:			13.15				\$10.00 \$10.05	
				nsaction	s			
	101		977	11040 01011			1978	
#			14				14	
Acres			1,700				14,700	
High Low			16.00 9.00				\$13.00 \$ 6.00	
Media	n		12.00				\$10.00	
Averag			12.14				\$10.00	

Multi-Year (2 year Entry)

Entries for both years are combined, rearranged in descending order of price and reprocessed.

ENTRY	1977-78	ACRES
1	\$28.00	100
2	\$22.00	200
3	\$19.00	300
4	\$17.00	2,000
5	\$16.00	400
6	\$15.00	500

Above are "clipped" in 70% Base.

	T-L-	
7	\$14.00	600
8	\$14.00	700
9	\$14.00	800
10	\$14.00	1,900
11	\$14.00	1,800
12	\$13.00	900
13	\$13.00	1,700
14	\$13.00	1,600
15	\$13.00	1,500
16	\$12.00	1,000
17	\$12.00	1,100
18	\$12.00	1,400
19	\$12.00	1,300
20	\$11.00	1,200
21	\$11.00	1,200
22	\$10.00	1,300
23	\$10.00	1,400
24	\$10.00	1,500
25	\$10.00	1,600
26	\$10.00	1,100
27	\$10.00	1,000
28	\$ 9.00	1,700
29	\$ 9.00	1,800
30	\$ 9.00	900
31	\$ 9.00	800
32	\$ 8.00	1,900
33	\$ 8.00	700
34	\$ 7.00	2,000

Below are "clipped" in 70% Base.

35	\$ 7.00	600
36	\$ 7.00	500
37	\$ 6.00	400
38	\$ 6.00	300
39	\$ 5.00	200
40	\$ 4.00	100

100% Da	ta Base	70%	Data Base
Entries	40	Entries	28
Acres	42,000	Acres	36,400
High	\$28.00	High	\$14.00
Low	\$ 4.00	Low	\$ 7.00
Median	\$11.00	Median	\$11.00
Average	\$11.60	Average	\$11.11

NATIONAL FOREST LANDS

All of that real property under the jurisdiction of the Forest Service, within the legally declared National Forest boundaries. This does not include National Grasslands or other properties under Forest Service Jurisdiction outside of the declared National Forest boundaries.

NATIONAL FOREST SYSTEM LANDS

All of that real property under the jurisdiction of the Forest Service.

NATIONAL GRASSLANDS

Properties acquired by the United States Government under Title III of the Bankhead-Jones Farm Tenant Act, and under the jurisdiction of the Forest Service. These properties are predominantly marginal farmland that has been reseeded to form grazing units. They are administered under different legal authority than the National Forests. They are included in any reference to National Forest System Lands.

PERCENTAGE DATA BASE(S)

Numerous references are made in the report to 100% or 70% data bases. The 100% data base refers to using all of the transactions pertaining to a particular animal type or area. The 70% data base means that after the transactions have been arrayed in descending order of price, 15% of the transactions have been "clipped" from the top of the array, and 15% have been "clipped" from the bottom of the array. The remainder then constitutes 70% of the applicable original transactions.

PRMO - PAIR MONTH

A pricing unit based on the price paid to graze one mother animal with unweaned offspring for one month.

PUBLIC LANDS

For the purposes of this report, public lands are defined as all of that real property under the jurisdiction of the BLM.

PUBLIC RANGELANDS

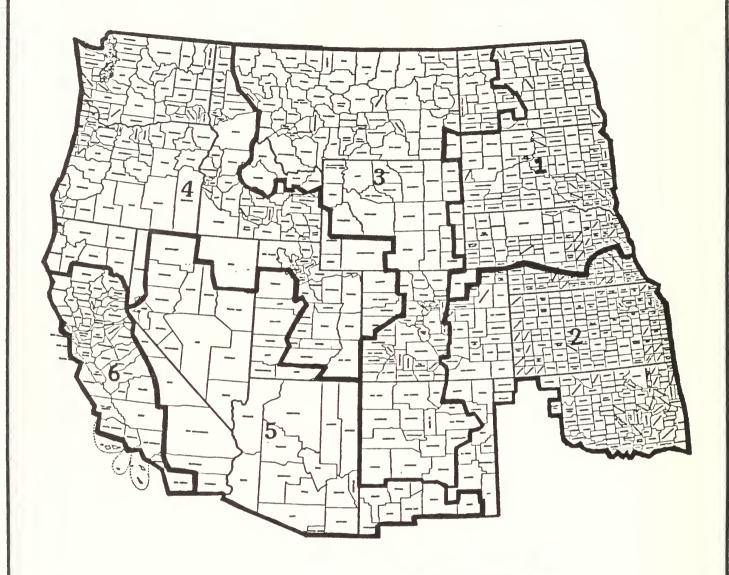
All of that real property (lands and improvements) under the jurisdiction of either the BLM or FS, utilized all or in part for livestock grazing, where the use is authorized by a grazing permit or lease to one or more operators.

SITE SPECIFIC

Site specific refers to those attributes and characteristics that are unique to a specific piece of real property.

PRICING OR PRICE AREAS

The estimates of fair market rental value for grazing use on public rangelands in this appraisal have been developed by dividing the 17 western states into different geographic areas. Each area exhibits reasonably homogenous prices. The bases for selecting these "Price Areas" is described in detail in the section entitled, "Development of Pricing Areas.



MATURE CATTLE, HORSES AND YEARLINGS

PRICE AREAS 1 THROUGH 6

SHEEP

WESTWIDE PRICE AREA



SUMMARY OF SALIENT FACTS AND CONCLUSIONS

1. Owner of record:

United States Government

2. Location of Subject:

Western United States

3. Description:

The authorized grazing use on approximately 318,000,000 acres of public rangelands under the jurisdiction of the Forest Service and Bureau of Land Managment.

4. Highest and Best Use:

Those uses authorized by grazing permits on National Forest System Lands or Public Lands, under the jurisdiction of the Forest Service and/or Bureau of Land Managment.

5. Date of Value:

October 1, 1983

6. Fair Market Rental Value of Grazing on Public Rangeland:

MATURE CATTLE & HORSES (Over 18 months of age)

PRICE AREA	PRIVATE LAND LEASE RATE	FAIR MARKET VALUE OF GRAZING ON PUBLIC RANGELANDS	ADVANCE PAYMENT	PAYMENT AT END OF SEASON
1	\$10.00/HDMO-PRMO	\$ 9.50/HDMO-PRMO	\$ 8.55/HDMO-PRMO	\$10.45/HDMO-PRMO
2	\$ 7.50/HDMO-PRMO	\$ 7.10/HDMO-PRMO	\$ 6.39/HDMO-PRMO	\$ 7.81/HDMO-PRMO
3	\$ 8.00/HDMO-PRMO	\$ 7.60/HDMO-PRMO	\$ 6.84/HDMO-PRMO	\$ 8.36/HDMO-PRMO
4	\$ 6.25/HDMO-PRMO	\$ 5.90/HDMO-PRMO	\$ 5.31/HDMO-PRMO	\$ 6.49/HDMO-PRMO
5	\$ 5.50/HDMO-PRMO	\$ 5.20/HDMO-PRMO	\$ 4.68/HDMO-PRMO	\$ 5.72/HDMO-PRMO
6	\$ 6.75/HDMO-PRMO	\$ 6.40/HDMO-PRMO	\$ 5.76/HDMO-PRMO	\$ 7.04/HDMO-PRMO

HDMO stands for Head Month, PRMO stands for Pair Month (i.e. Cow/Calf, Ewe/Lamb, Mare/Colt).

YEARLING CATTLE (Under 18 months of age)

PRICE AREA	PRIVATE LAND LFASE RATE	FAIR MARKET VALUE OF GRAZING ON PUBLIC RANGELANDS	ADVANCE PAYMENT	PAYMENT AT END OF SEASON
1	\$ 7.50/HDMO	\$ 7.10/HDMO	\$ 6.39/HDMO	\$ 7.81/HDMO
2	\$ 6.75/HDMO	\$ 6.40/HDMO	\$ 5.76/HDMO	\$ 7.04/HDMO
3	\$ 6.25/HDMO	\$ 5.90/HDMO	\$ 5.31/HDMO	\$ 6.49/HDMO
4	\$ 5.70/HDMO	\$ 5.40/HDMO	\$ 4.86/HDMO	\$ 5.94/HDMO
5	\$ 5.50/HDMO	\$ 5.20/HDMO	\$ 4.68/HDMO	\$ 5.72/HDMO
6	\$ 4.75/HDMO	\$ 4.50/HDMO	\$ 4.05/HDMO	\$ 4.95/HDMO

SHEEP

PRICE AREA	PRIVATE LAND LEASE RATE	FAIR MARKET VALUE OF GRAZING ON PUBLIC RANGELAND		ADVANCE PAYMENT	PAYMENT AT END OF SEASON	
WEST WIDE	\$ 1.10/HDMO-PRMO	\$ 1.05/HDMO-PRMO	\$.95/HDMO-PRMO	\$ 1.16/HDMO-PRMO	

Assumptions and Limiting Conditions

In making this appraisal, the appraisers have had to make certain assumptions and set certain conditions that limit its general applicability. These are as follows:

The Bureau of Land Management (BLM) and the Forest Service (FS) administer grazing on over 30,000 allotments within approximately 318 million acres of federally owned rangelands throughout the 16 western states and two counties in Texas within which are National Grasslands under the jurisdiction of the FS. Because of the vast scope of the public rangelands 1/, wide variations in conditions and situations involving grazing on Federal lands exist. These variations are briefly described in a later section of this report entitled, "Subject Land Data." While an appraisal that would take into consideration the unique or subtle differences of each allotment would be desirable in the extreme, it is not realistic. The cost and time requirements for appraising the fair market grazing rental value of each individual allotment would be both prohibitive and unjustifiable.

^{1/} The Public Rangelands Improvement Act of 1978 defines "public rangelands" to mean "lands administered by the Secretary of the Interior through the Bureau of Land Management and the Secretary of Agriculture through the Forest Service in the 16 contiguous western states on which there is domestic livestock grazing or which the Secretary concerned determines may be suitable for domestic livestock grazing." Throughout this appraisal report, the term "public rangelands" is used to denote all lands administered by the BLM and the FS, regardless of administering agency, while the term "public lands" is used to denote lands administered specifically by the BLM.

This appraisal is being made using mass appraisal techniques 2/, considering the conditions and situations that exist for the majority of the permittees/lessees and allotments. It must be recognized that no mass valuation method, no matter how complex its components, can account for all of the subtle differences between the individual use situations. This limitation applies to comparable lease appraisal, budgeting technique, or any general fee formula. Therefore, in using this method, the appraisers have not been able to consider all of the variations and extremes in condition and use that are present in some allotments.

- 2. The value estimates derived in this report are not intended to represent the "site specific" fair market rental grazing value of any individual allotment. Rather, the values derived are intended to represent a reasonable estimate of the fair market value of grazing on the majority of the public rangelands, under the limitations and conditions presented.
- 3. Statistical methods have been employed in the sorting and refining of the comparable private lease data used in this report. The value conclusions reached by the appraisers are based primarily on a direct comparison method of appraisal and do not rely on statistical methodology as their foundation. In no case do the appraisers represent this appraisal report or the conclusions contained herein as being a product of statistical methodology.
- 4. The data regarding the grazing use and the lands involved were prepared by field offices of the BLM and the FS, using various types of records and computerized data banks. The appraisers accept this data as being sufficiently accurate for the purposes of this appraisal.

^{2/} See Definition of Mass Appraisal in Glossary of Terms.

- 5. If any information in this report deviates from previously published information about public rangeland acreage or numbers of allotments, permittees, or livestock being run, it is assumed that the differences are due to the fact that the current information has been compiled on the basis of different geographic areas than previously used.
- 6. Certain information, facts, and opinions have been obtained from sources considered to be reliable. It is assumed that these items are accurate and conform to the true facts.
- 7. The terms and conditions under which grazing use is actually being carried out on the public rangelands are described in this report as presented to the appraisers by range management staff specialists directly involved in grazing administration. These terms and conditions may differ slightly from those described in written directives, regulations, and other pertinent documents, since the field personnel within each agency have some latitude in interpreting and applying these forms of guidance. It is not the intent of the appraisers to raise questions regarding actual administration of grazing programs by describing these differences, but rather to consider the conditions as they actually are administered.
- 8. Permit value is the term given to the costs of acquiring the privileges to graze on the public rangelands, or the value that is attributed to having privileges to graze livestock on these lands. In appraisal terminology, permit value can be defined as a leasehold value that accrues to the holder of the lease when contract rent is less than economic rent or fair market rental value. This permit value is demonstrated by an associated increase in the value of ranches with privileges attached and by amounts of monies paid to have privileges transferred from one base property owner to another.

The appraisers have been advised that it was never the intent of Congress to allow public rangeland users to acquire a leasehold interest in the land. In addition, the courts have always held that in situations where grazing privileges have been involved in condemnation cases, the loss of grazing privileges is not compensable. The appraisers recognize that permit values do exist but state that it is not within their purview to decide the legal issues involved. Therefore, the appraisers have not considered permit value as a factor affecting the fair market rental value of public rangeland grazing.

- 9. It is assumed that the Federal Government has, either directly or indirectly through reduction in grazing fees, paid for all of the improvements made on FS and BLM allotments since 1969 and most improvements on National Grasslands. Forest Service and BLM shall additionally compensate permittee/lessee for their interest in public rangeland improvements when his/her permit/lease is terminated through no fault of their own. Therefore, no adjustment is made in the estimate of fair market rental value for user-constructed public rangeland improvements or user contributions to public rangeland improvements.
- 10. The appraisers recognize that the Government, through the two administering agencies, has the power of eminent domain to acquire any needed legal access. Thus, the estimates of fair market value are based on the existing situation and not a hypothetical condition that the agencies would acquire legal access.

- 11. This appraisal has been made independent of any prior appraisals or grazing evaluation studies. The appraisers are familiar with the approaches used and the positions taken in some of these earlier studies, but have not allowed these to influence their assessment of the appraisal at hand. All conclusions contained in this report are those of the appraisers, based on their analysis of the pertinent facts.
- 12. Certain transaction data and other information concerning private grazing leases were given with the understanding that every effort would be made to maintain its confidentiality. The appraisers assume no responsibility for this matter once the appraisal is completed and the information is no longer under their custody.
- 13. This appraisal is to be used in whole, and no fractional portion of it should be used in connection with any other report, nor is it to be construed as applicable to any property use other than the grazing of livestock, as authorized by the FS or the BLM within the 16 western states and the grazing jurisdiction of FS in Hemphill and Dallam Counties in Texas.
- 14. Possession of this report or a copy thereof does not carry with it the right of publication by anyone but the United States Government or its lawful assignees.

Purpose of the Appraisal

The purpose of the appraisal is to estimate the fair market rental value of grazing on the public rangelands, as administered by the BLM and the FS, in the 17 western states.

Function of the Appraisal

The function of the appraisal is to provide the Secretaries of the Department of Interior and Agriculture a basis for decisions in determining grazing rates on public rangelands.

Definition of Value

Fair market rental value as used in this appraisal is defined as, "The amount in cash, or in terms reasonably equivalent to cash, for which in all probability the grazing use would be rented or leased by a knowledgeable owner willing but not obligated to rent or lease to a knowledgeable renter or lessee who desired but is not obligated to lease. It can also be defined as, "The amount that livestock owners would probably pay for the grazing use if it were offered for rent or lease in the open market."

Rights Appraised

This appraisal considers the grazing use associated with the rights of permittees and lessees to use specific areas of the public rangelands for livestock grazing. The BLM and the FS grants these rights 1/of use, subject to the terms and conditions established by applicable laws and regulations, and the terms and conditions set forth in the permits and leases. These terms and conditions are described in detail in Figure 1, "Lease Terms and Conditions." This figure presents the terms and conditions in the same format that was used to collect information on private lease transactions.

^{1/} Appraisers use the term "rights" to describe any situation where the legal
owner of the property has authorized another to utilize the property for a
specified use(s). The authorization may be in perpetuity or for a specified
time period. The authorization may contain terms and conditions which provide
for revocation for violation of the terms and conditions, nonuse, nonpayment,
etc. In the case of grazing permits/leases, the legal owner of the lands, the
Federal Government, has authorized livestock operators to use the public
rangelands for grazing use. This authorization is in effect for the length of
the permit/lease, and subject to its terms and conditions and to governing
laws and regulations. Thus, the appraisers view grazing permits/leases as a
temporary transfer of rights to use the property for grazing. Both agencies
hold that grazing use of the public rangelands is a revocable privilege.

PERMIT/LEASE TERMS AND CONDITIONS 1/

REWAKS						
FS-GRASSLANDS	Generally requires control of base property and livestock. Base property can be leased if member and association controls base property. In limited cases, livestock under other ownership can be taken in on a shared offspring basis.	Same as NF Land	Same as NF Land but base property can be leased if leasing has been allowed by the grazing association, and association controls base property.	Base property must be within area of which Grasslands are a part, and be consistent with local practices promoting development of Grassland agriculture.	Same as for NF Land.	Direct permittee handled like NF. Permittee operating under Assoc. managment are penalized in accord with FS approved association rules.
FS - NF LANDS	Not allowed, base property and livestock must be owned by permittee.	1-10 years, prefer 10 years.	Privileges cannot be transferred. Permittee may cancel permit and FS reissue to buyer of base land and cattle. Buyer most always gets permit, but there may be changes in animal numbers allowed under new permit.	Varies by local area.	\$/animal month. (6 mo. or older)	For violations of terms and conditions of the permit: (A) 1.First offense, no negligence, a reprimend or suspension of a small percentage of permitted use. All excess grazing billed at calculated base rate of \$3.80 AM times PRLA Indexes
BIM	1.Base property can be leased and lessee becomes the ELM permittee/lessee for the term of the base property lease. 2.Permittee/lessee can run livestock of others with documentation that he/she holds control of livestock.	1-10 years, mostly 10 years.	1.Privileges can be transferred from one base property to another with agency approval. 2.Base property can be leased or sold with privileges transferred to new owner/lessee with agency approval.	Living on or within 1000 miles of permitted area.	Fees are based on \$/NUM. Yearling cattle = 1 AUM. (6 mo. or older)	For excess animals, wrong season of use, violation of terms of permit/lease: (A) Damages are calculated at western Private Land Lease Rate (\$8.36/NUM for 1983) 1.Nonwillful: Rate x 1. 2.Repeat Nonwillful: Rate x 2. 3.Willful: Rate X 3.
ITEM OF COMPARISON	Subleasing <u>3/</u>	Term of Lease	Transfer Rights	Distance From Lessee's Base	Pricing Units	Penalties for Unauthorized or Extra Animals?
No.2/	15	21	22	25	42	56

 ^{1/} Agency permit/lease specifications, as provided by regulation, policy, and field interpretation are generalized.
 2/ The numbers correspond to the element numbers used in the Grazing Rental Data Input Record of comparable transactions.
 3/ The term applies to any situation where livestock of a third party is grazed on the property involved by a permit or transaction.

REMARKS						attle,	cow/calf,		ice for N.F. and se 1969 it for ade by sees.
REM						Type meaning cattle, sheep, etc.	Class meaning cow/calf, steers, etc.		\$1.23 base price for grazingfees on NF and BLM lands since 1969 reflects credit for improvements made by permittees/lessees.
FS-GRASSLANDS		Same as BLM.	Same as NF Land.	Generally same as NF.	Joint, final decision rests with agency.	Agency.	Agency and Association Boards or Direct Permittee.	Agency and Association Boards.	Permittees are required to make conservation practice improvements as payment-in-kind. Percentage of "offset" against fees varies with the Regions.
FS - NF LANDS	2.Second or willful offense, cancellation or suspension of whole or part of permitted use. All excess grazing billed at calculated rate of \$4.48/ALM. (B)Impoundment and sale authority may be warranted.	Same as BLM except may be credited to next year's bill.	Advance payment required yearly, or in two or more payments.	Written for a period of less than one year. No implied priority for renewal, but may be reissued to the same person. No base property requirement. Livestock ownership not required but priority given to owners (vs. caretakers) of stock.	Joint, final decision rests with agency.	Agency.	Same as BLM.	Agency.	Six Western Regions report 84% Federal and 16% private financing of improvements overall. Current Agency policy encourages permittee particitation on a 50/50 basis for structural improvements. On coop. agreements, on coop. agreements, users often contribute labor, etc. while agency furnishes materials.
BLM	4.Repeat willful: Rate X 3 & suspension of privileges. (B)Impoundment and sale of of Livestock and Criminal Penalty may be warranted.	Refunds or credits on application are made where changes in turnout, or cancellations of planned use are made.	Advance payment is usually required in most cases unless allotment is under Allotment Management Plan. Then payment can be made after use, at end of the grazing season. Split season and quarterly billings are also used.	(Temporary Non-Renewable) Issued on a temporary basis for grazing livestock without a priority of reissuance.	Same as FS-NF Lands.	Agency.	Agency/permittee and other permittees on common allotments.	Agency.	Agency, users, joint, and third parties. Shares vary from 0% to 100% Federal, and 0% to 100% private, in 10 western States. Permittees may make improvements under Sec. 4 or Sec. 15. permits. Users often contribute labor, etc. while agency furnishes materials.
TITEM OF COMPARISON	Penalties for Unauthorized or Extra Animals? (Continued)	Refunds or Credits	Payment Schedule	Temporary Permits	Determine period of Use	Determine Type of Livestock	Determine Class of Livestock	Determine Animal Numbers	Construct Range Improvements
S. C.	26	57 58	59	EN .	99	29	89	69	70

No.	ITEM OF COMPARISON	BLM	FS - NF LANDS	FS-GRASSLANDS	REWARKS
7.1	Replacement	Same as new construction.	Same as new construction.	Same as new construction.	
72	Repair and Maintenance	Varies from State to State and from District to District as to percentage performed by users. Ranges from O% to 100% westwide.	Mostly by users. Structures maintained by benefiting activity. Permittee maintenance averages about 85%.	Permittee is responsible for range improvments.	Association may be permitted.
73	Revegetation	Similar to new construction on structural improvements. Varies from 0% to 100% Federal. Users often contribute labor, etc. while Agency furnishes materials.	Non-Structural improvements primarily done by agency generally requires a nonuse agreement.	Generally handeled through CP's on a variable share basis.	
74	Ownership of Improvements	Under improvement permits, user retains ownership. Ownership is in proportion to original investment. Investment in improvements is carried over to new permittee/lessee through compensation between the parties at the time of transfer of permit/lease.	Ownership rests with the U.S. Government.	Same as NF.	See 43 CFR. 4120.6 for provisions regarding improvements.(BLM). See 36 CFR. 222.6 & 222.9 regarding improvements (FS).
75	Legal Liability	Lessee/Permittee.	Permittee.	Same as NF.	
92	Daily Operation	Lessee/Permittee.	Permittee,	Same as NF.	
77	Grazing System	Joint, mostly as required by FLFW for allotment mgmt. plans. Lessee/permittee often unilaterally plans grazing systems for scattered tracts with "on-off" provisions.	Agency in cooperation with grazing permittee or grazing association.	Same as NF.	
78	When to Move to and From Allotment	Agency with cooperation of permittees.	Ajency with cooperation. of permittees.	Agency and Permittee.	
79	Who Moves Livestock Lessee/Permittee.	Lessee/Permittee.	Permittee.	Permittee.	
90	Decision to Move Livestock to Different Pastures	Agency/Joint.	Agency and permittee.	Agency and Permittee	
81	Moves Livestock	Lessee/Permittee.	Permittee.	Permittee.	
82	Doctoring	Lessee/Permittee.	Permittee.	Permittee.	

COMPARISON		BLM be/permittee	FS - NF LANDS	FS-GRASSLANDS Permittee.	REMARKS
dup	Lessee/Permittee.		Permittee.	Permittee.	
Salt Lessee/Permittee.	Lessee/Permittee.		Permittee.	Permittee.	
Water, General The party that pays for the development of the water source acquires the associated water rights.	The party that pays for the development of the water source acquires the associated water rights.		Water rights are filed with State and retained in the name of the U.S.	Same as NF.	
Water Hauling Lessee/Permittee.	Lessee/Permittee.		Permittee	Same as NF.	
Water Pumping Lessee/Permittee normally. Joint in some cases where water serves other of the "multiple uses of public land	Lessee/Permittee normally. Joint in some cases where water serves other of the "multiple uses of public land		Same as BLM.	Same as NF.	
Supplemental Feed Lessee/Permittee, only with Agency approval.			Same as BLM.	Same as NF.	
Livestock Losses Lessee/Permittee.	Lessee/Permittee.		Permittee.	Permittee.	
Authorize Other Agency.	Agency.		Agency.	Agency.	
Lease Terms Agency.	Agency.		Agency.	Agency.	
Real Estate Taxes Agency, In-Lieu Payments. California and Washington have possessory interest tax on Federal grazing leases.	Agency, In-Lieu Payments. California and Washington have possessory interest tax on Federal grazing leases.		Same as BLM.	Same as NF,	
Livestock Taxes Lessee/Permittee.	Lessee/Permittee.		Permittee.	Permittee.	
Moxious Weed Agency authorization required. Control may be by Agency, joint or lessee/permittee.	Agency authorization required. Control may be by Agency, joint or lessee/permittee.		Agency authorization required. Work is generally accomplished through County Weed control districts.	Same as NF, with work done through association	
Predator Control Agency, and/or other Agency authorization required for certain types of control (e.g., aerial gunning or poison).	Agency, and/or other Agency authorization required for certain types of control (e.g., aerial gunning or poison).		Agency authorization and coordination with Fish and Wildlife Service USDI.	Same as NF.	
Pest Control Agency authorization required. Control may be by Agency, joint, or lessee/permittee.	Agency authorization required. Control may be by Agency, join or lessee/permittee.		Agency authoization and coordination with other Federal and State Agencies.	Same as NF.	
Parasite Control Lessee/Permittee.	Lessee/Permittee.		Permittee.	Permittee,	

REWARKS		
FS-GRASSLANDS	Same as NF.	Agency-appropriated funds. Grasslands under a "Grazing agreement" can be administered by the association which does portions of the work normally done by FS and deducts these costs from the grazing value.
FS - NF LANDS	Agency has authority to control access. Permittee does not control access to and within grazing allotments. Permittee often controls physical access to the allotment as his/her may surround or block it from the most reasonbable public access point.	Agency-appropriated funds.
BIM	Agency has authority to limit public access in cases of emergency. Lessee does not normally have control over who has access to and within the grazing use areas. Lessee often controls by owning surrounding lands.	Agency-appropriated funds.
NO. ITEM OF COMPARISON	Access Control	Administrative Costs
No.	109	NA NA

AREA DATA

General

This appraisal considers the authorized grazing use on more than 318 million acres of public rangelands that are located within 415 counties of the following western states (see Exhibit 1 in Addenda, map of "General Location of Public Rangeland Grazing Areas"):

1.	Arizona	7.	Nebraska	13.	South Dakota
2.	California	8.	Nevada	14.	Texas
3.	Colorado	9.	New Mexico	15.	Utah
4.	Idaho	10.	North Dakota	16.	Washington
5.	Kansas	11.	Oklahoma	17.	Wyoming
6.	Montana	12.	Oregon		

The topography of the overall area ranges from the nearly level or gently rolling lands of the Great Plains to the steep and rugged regions of the Rocky Mountains. Elevations range from sea level along the California coast to over 14,000 feet along the Continental Divide in Colorado (see Exhibit 2 in Addenda, "Relief Map").

The climates of the area range from the temperate climate of the Northern Great Plains, Upper Missouri River Valley, and intermountain regions to the warm climate of the southwestern desert regions. Precipitation over the area ranges from considerably less than 6 inches in southern Nevada and the Mojave Desert in California to in excess of 18 inches in certain areas of Oregon and Washington.

The area includes both sparsely and densely populated regions. Several of the states within the area have one or more counties that have population densities of one person or less per square mile. These states are Colorado, Idaho, Montana, Nebraska, New Mexico, North Dakota, South Dakota, Utah, and Wyoming. Other counties that have densities of 250 or more persons per square mile are Boulder County, Colorado; Weber County, Utah; and Bernalillo County, New Mexico.

The economy of the area, in common with much of the rest of the United States, appears to be cautiously edging toward a period of recovery after the serious downturn of 1981 and 1982. Housing starts are up, automobile sales are on the increase, and interest rates have declined somewhat from levels of two years ago. Agriculture, including livestock raising, has shared only marginally in the current recovery. This industry continues to be plagued with constant surpluses, soft markets, and high production costs. Many farm and ranch operations are currently at or below the break-even point, and even the more efficient operations are rarely returning more than 2 or 3 percent on investments. Farm and ranchland prices, which in the late 1970's were increasing at rates as high as 25 to 30 percent per year in some states, have flattened out and even decreased as much as 10 to 15 percent during the past 3 to 4 years.

The downturn in the economy has had the effect of more or less drying up the investment capital that had fueled the boom in demand for rural lands. However, the reversal in the trend of increasing prices which allowed or caused many farm and ranch operators to increase their mortgages, has reduced their equities. This has reduced their ability to borrow operating funds and added to their cash flow problems. The range livestock industry seems to be

more seriously threatened by cash flow problems than general agriculture. Livestock prices have remained relatively constant while production costs have increased steadily.

The western sheep industry seems to have been hit even harder than the beef industry. Industry leaders cite a number of reasons, such as predator problems and banning of certain control methods, imports of both wool and meat, increasing use of synthetic fibers, inability to hire herders at a price they can afford, and others. The numbers of sheep being run on western rangelands is steadily decreasing. The FS, for example, has a significant number of high mountain sheep allotments in forests in the Rocky Mountains that are going unused. These have been abandoned or relinquished by operators who report that they have done so because of costs and a mounting number of problems in operating on these allotments. Where feasible, other areas are being converted from sheep to cattle use.

The seasons of livestock use on native rangelands vary from spring, summer, and fall in the northern regions of the area to year-round in the southernmost regions. Historically, cow/calf and ewe/lamb operations predominated on these native grazing lands. In recent years, however, a significant number of cow/calf operators have ceased to run their own livestock and have turned to selling forage to yearling operators. Also, there appears to be an increase in the "mobility" of livestock operations. In years past, it was quite common for operators to buy hay from hay producing areas and have it trucked to the base areas. A growing trend now is to move livestock to other areas for feeding and grazing depending on the needs and goals of the individual operator.

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SUBJECT LAND DATA

Administrative Responsibility

The 318 million acres of public rangelands within the 17 western states are administratively divided into three different categories: (1) public lands, administered by the BLM; (2) National Forest lands, and (3) National Grasslands, administered by the FS (see Exhibit 3 in Addenda, map of "Federal Lands in the United States"). The goals and objectives for managing lands in each of these categories differ slightly.

At the field level, the overall responsibility for grazing administration on the public lands is divided among ten BLM State Offices. On-the-ground management responsibility is delegated through 51 District Offices and 151 Resource Area Offices. Administrative responsibility for lands administered by the FS in the 17 western states is divided among six Regional Offices, while on-the-ground management is handled by 88 Forest Supervisor Offices and 456 Ranger Districts. Combined, this makes 155 headquarters offices and 607 area and district field offices, or a total of 762 offices, that are involved in the field-level administration of grazing on the public rangelands. These offices are in addition to the headquarters offices that each agency maintains in Washington, D.C., where general rules, policies, and regulations affecting grazing administration are established.

The individual grazing program managers or office managers at each level in the chain of administrative authority apply their own interpretations to the general rules, regulations, and policies provided to them and administer the grazing use within their areas of jurisdiction accordingly. Variations in policies and operating procedures can originate at any of the regional, state, forest, district, area, or ranger district levels. In addition, overall

policy guidance frequently changes with political administrations and with changes in agency managers at various levels.

Certain provisions of the applicable laws and regulations have resulted in other "layers of administrative authority" through the creation of grazing advisory boards to offer advise and make recommendations concerning the development of allotment management plans and use of range betterment funds. Grazing associations can be established on any of the public lands (BLM), National Forest lands, or National Grasslands. Associations on National Grasslands can, through recommendations or by establishing rules, set conditions which apply to grazing use within its area of jurisdiction. On NF and BLM rangelands, grazing associations can through their aggregate influence affect the management of the allotments within their area. These differences show up between users in the same geographic area as well as between users in different geographic areas.

Other provisions of the applicable laws and regulations result in further differences in the manner in which use by any individual or groups of users is administered. Management programs such as Cooperative Management Agreements (BLM) and Experimental Stewardship give the involved users some latitude in their grazing operations, but concurrently require them to assume certain liabilities and responsibilities for protection of the resources that were previously held by the administering agency. Other management programs such as those that result in Allotment Management Plans, private allotments, common use allotments, exchange—of—use agreements, on—off permits, and others also create different conditions and situations for use by individuals or groups of users.

All of the preceding conditions result in variations in administration, which include, but are not limited to, decisions about:

- 1. When to allow permittees/users to construct or place range improvements on agency lands.
- Whether to accept or require contributions (in cash and/or labor) for construction of range improvements.
- 3. When and where range improvements are needed and are to be constructed.
- 4. How provisions for taking nonuse are to be applied.
- 5. How transfers of privileges are to be treated.
- 6. How grazing use associated with cancelled or relinquished permits/leases will be reallocated.
- 7. What limits will be placed on the percentage of earned grazing fees that may be offset by user expenditures on required conservation practices on the National Grasslands.

Size and Number of Tracts or Allotments

The public rangelands are divided into more than 30,000 tracts or allotments. These tracts or allotments range from less than 40 acres to more than 1 million acres. Table SLD-1 gives a breakdown in the number of tracts or allotments by size and administrative category. Table SLD-2 contains a summary of other selected information regarding the public rangelands:

Table SLD-1.

Public Rangeland Tracts or Allotments

By Size and Administrative Category

SIZE CLASS Acres	PUBLIC LANDS 1	OR ALLOTMENTS NATL. FOREST NA Numl		TOTAL
0-160	4,293	274	229	4,796
161-640	4,732	361	438	5,531
641-2,000	4,431	704	621	5,756
2,001-10,000	4,888	3,093	499	8,480
10,001-100,000	2,581	2,801	51	5,433
100,001-500,000	233	33		266
500,001-1,000,000	19	2		21
Over 1,000,000	3			3
TOTALS	21,180	7,337	1,677	30,286

	ADMIN BY BLM	NF	NGL	TOTALS
GROSS ACRES	174,117,029	129,521,890	3,784,804	307,423,723
ACRES IN ALLOTS	155,757,348	89,144,903	3,696,991	248,599,242
# OF CATTLE ALLOTS	16,470	5,434	1,711	23,615
# OF SHEEP ALLOTS	1,246	1,495	17	2,758
# OF HORSE ALLOTS	172	156	6	335
# OF MIXED ALLOTS	3,292	182	104	3,578
TOTAL ALLOTMENTS	21,180	7,268	1,838	30,286
# OF PERMITS	21,117	10,091	1,058	32,266
# OF OPERATORS	21,555	9,969	2,108	33,632
ACT CATT AUMs/AMs	11,297,905	5,395,490	1,124,944	17,818,339
ACT SHEEP AUMS/AMS	2,123,012	2,650,977	144,168	4,918,157
ACT HORSE AUMS/AMS	59,140	12,920	5,621	77,681
ACT OTHER AUM/AMS	2,201	43,721	3,511	49,433
TOTAL AUMS/AMS	13,482,258	8,103,108	1,278,244	22,863,610
LARGEST PERMIT	107,227 AUMs	34,722 AMs	13,419 AMs	NA
SMALLEST PERMIT	1 AUMs	l AM	1 AM	
RGE OF SIZE (60%)	1-10,000AUM	1-7,924 AMs	18-2262 AMs	
BEST STK RATE	1 Ac/AUM	1 Ac/AUM	1 Ac/AUM	
WORST STK RATE	99 Ac/AUM	99 Ac/AUM	99 Ac/AUM	
60% RANGE STK RATE	1-99 Ac/AUM	1-99 Ac/AUM	1-15 Ac/AUM	
AVERAGE STK RATE	11.5 Ac/AUM	16.0 Ac/AUM	2.9 Ac/AUM	10.9 Ac/AUM

Four charts showing certain public rangeland data follow. The first chart summarizes the data by administering agency. The second chart shows National Grasslands summarized by pricing area, the third shows National Forest lands and the fourth shows the public lands administered by BLM. Additional tables showing the data for each county are in Exhibit 6 in the Addenda.

PUBLIC RANGELAND DATA SUMMARY FORMAT 1

LANDS ADMINISTERED BY PRICE AREA

123	1 2 3 6 GR0SS	7 GROSS	8A NUM	88 N		98 M	OA 10 MM	B 11A	118 NM	12A 12B	13A 13	1 38 4A 1	1 48 5A 1	1 158 6A	168	1 7A 17B	1 8A 18	ا 8 9A ا	98 2	0 21	23A ACTIVE	23B ACTIVE	23C ACTI	23D ACTI
PRICE AREA	ACRES IN CNTY	ACRES IN ALTS	CAT	VC AL		C H	VC HR VC AL AL AL	MX VC	A YC	\$U 1	SIZ % SIZ % SZ % SZ % SZ % SZ % SZ % SZ	5 SZ 3	% SZ S 4 L	2S %	% NS	SU 9	SN ZS	SZ % 8 US	% NU IS PE	M NUP	CATTLE	AMS SHEEP	HORS O	AMS OTHER
ВГМ	.M 174,117,029 16,470 1,2	29 155,757,	16,4	02	4	-	72	3,2	92	4,293	4,732	4,43	1 4,88	88 2,	581	233	19	8	21	,117	3 21,117 11,297,905 21,555 2,123,013	,905 59,1 2,123,012	59,1	2,201
NFS	129,521,890 5,434 89,144,903	90	5,43		1,495		156	182		274	361	704	1	3,093 2,801 33	801	33	2		10	160,	10,091 5,395,490 12,920 9,969 2,650,977 43,721	2,650,	12,92	43,721
NGL	3,784,804	6,9	1,711		17		9	104		229	438	621	499	51					٦.	058	1,058 1,124,944 5,621 3,511 2,108 144,168	944	5,621	3,511
TOTAL	307,423,723 23,615	23,248,599,2	23,61	1	2,758	3.	335	3,5	4,79	3,578	31 5,	756 8	5,756 8,480 5,433 266	5,433	266	.21		m	32,266	33,	32,266 17,818,339 77,681 33,632 4,918,157	4,918,	77,68	1 49,433

*SIZE CLASSES, IN ACRES:

Size 13A = 160 - 640 Size 14A = 641 - 2,000 Size 15A = 2,001 - 10,000Size 12A = 0 - 160

PUBLIC RANGELAND DATA SUMMARY FORMAT 1
NATIONAL GRASSLANDS BY PRICE AREA

1 2 3	6 GROSS	7 GROSS		88	9A NUM	98 N.	10A				13A	138	1 4A 1	1 4B 5A	158	1 6A 10	1 58 7A	178	1 8A 1	ا 88 9A	198		21	23A ACTIVE		23 ACTI	23B ACTIVE
PR I CE AREA	ACRES IN CNTY	ACRES IN ALTS	CAT	A K	SHP	S A	HR VC AL AL	A X	AL SI	SIZ %	512	ns NS	SZ 3 U	SIZ % SZ %	us US	SZ U	2S 22	US %	SZ %	% SZ S	SZ %	PER	NUM	AMS		SHEE	AMS AMS SHEEP HORS
-	1,227,310	0 61,204,614	. •		-		2				124		236	20	6	80							746	413,16		3 2,	2,713
2	776,735	776,735 770,402 527	527				-		~	81	164		121	105	5	_						208	510	510 192,058			
m	1,600,449	,570,86	531		16		2	89		4	150		210	172	2	32						=	782	480, 28	ω.	141,	782 480,285 141,455 4,832
4	180,310	180,310 151,107 20	20				_						4	13		4						22	70	70 39,438			165
TOTAL	TOTAL 3,784,804	3,696,991	1,71	_	17		9	104	229	6	438		621	499	6	15						1,056	2,108	1,124,	944	44,	1,058 1,124,944 5,621 3,511 2,108 144,168

Size 15A = 2,001 - 10,000 Size 17A = 100,000 - 500,000 Size 18A7 = 500,000 - 1,000,000 Size 19A = over 1,000,000 Size 14A = 641 - 2,000Size 13A = 160 - 640 Size 16A = 10,001 - 100,000 Size 12A = 0 - 160

*SIZE CLASSES, IN ACRES:

PUBLIC RANGELAND DATA SUMMARY FORMAT 1
NATIONAL FOREST LAND BY PRICE AREA

1 2 3 6 7 CROSS GROSS PRICE ACRES ACRES AREA IN CNTY IN ALTS	1,451,046	2 342,405 318,186 17	3 44,290,921 2,227	4 46,852,591 1	5 26,462,967 1,165	6 10,121,960 5,639,369	TOTAL 129,521,890
8A 89 NUM NI CAT VI	272	17	2,227	1,326	1,165	427	5,434
NM NU VC SH AL AL			562	536	353		
9A 9 NUM N SHP V ALT A		9	12	98	33	38	1.495
NW NY NY NY AL AL AL AL	1		_				
10A 10B NM NM HR VC AL AL	-	_	100	48	m	4	-
_			6	47	22	12	157
11A 11B NM NM MX VC AL AL	m	2	96	7	2	2	182
12A 1 12A 2 SIZ			150	8	2		32
2A 12B	7		0	82	20	15	274
18 13A SIZ 2			174	109	3	2	4
A 13B Z % US	0		4	6	36	22	361
1 B 4A SZ 3	83	2	285	165	114	52	
14B 9							704
5A 15 5Z % 4 US	128	13	1,318 1,048 10	785	678	171	704 3,093 2,801
1 58 6A 5 SZ	8 1	=	-	808	619	217	1 2.
168 % US			048	88	6	7	801
1 7A SZ 6 1			10	9	16	-	33
178 { % US							.,
1 1 1 1 1 1 1 44 14B 5A 15B 6A 16B 7A 17B 8A 18B 5Z % 5Z % 5Z % 5Z % 5Z % 3 % 3 US 4 US 5 US 6 US 7 US				2			2
1 9A SZ 8							
198 % US							
20 NUM PER	406	27	4,17	2,83	2,257	391	10,01
21 NUM OPR		27	4,01	2,86	2,247	401	91
23A ACTIVE AMS CATTLE		6,725	4,179 1,916,546 4,010 842,816	2,831 1,293,861 2,885 92	1,794,831	189,370	5.395.
23B ACTIVE AMS SHEEP			546 842,	921,617	831 863,167	0 23,	12,920
i		144	816	617	167	23,233	-
23C ACTI Avis HORS			5,874	5,714	902	359	2,920
23D ACT I AMS OTHER		4,392	17,720	5,428	706 14,523	1,658	

Size 15A = 2,001 - 10,000 Size 19A = over 1,000,000 Size 18A7 = 500,000 - 1,000,000 Size 14A = 641 - 2,000Size 17A = 100,000 - 500,000 Size 13A = 160 - 640Size 16A = 10,001 - 100,000 *SIZE CLASSES, IN ACRES: Size 12A = 0 - 160

PUBLIC RANGELAND DATA SUMMARY FORMAT 1
LANDS ADMINISTERED BY BLM BY PRICE AREA

23D ACT I AUMS OTHER	128	357	1,644		44	28	2,201
23C ACTI AUMS HORS		1,539	25,957	14,622	16,732	290	59,140
23B ACTIVE AUMS SHEEP	44,577	48,485	752,295	708,781	547,065	21,809	,905 59,140 2,123,012 2,2
23A ACTIVE AUMS CATTLE	151,853	485 301,157 48,485 1,539	3,573,101 9,804 752	6,369 3,389,104 6,324 70	3,453 3,788,004 16,732	442 460 94,686 21,809	17 11,297,905 21,555 2,12
21 NUM OPR	1,029	485	9,804	6,324	3,453	460	21,117
B 20 NUM PER	974	494	9,370	6,36	3,468	442	21,1
9A 19 SZ % B US			-		2		m
1 8A 18B SZ % 7 US			2	7	10		19
1 178 52 % 6 US			19	78	133	m	233
12A 12B 13A 13B 4A 14B 5A 15B 6A 16B 7A 17B 8A 18B 9A 19B S1Z % S1Z % S2 % S2 % S2 % S2 % S2 % N 1 US 2 US 3 US 4 US 5 US 6 US 7 US 8 US P	80	47			. 266	13	2,581
A 158 (2 % 94 US	23	129	2,250 (1,029 1,270 1,121 1,247 824	1,046	93	4,888
A 148 5 Z % S 3 US	69	1 06	2,431 2	121,	500	120 9	4,431 4
138 4 % S			1	70 1			1
28 13A \$ SIZ \$ 2	243	104	2,635	1,2	353	127	4,732
124 1 SIZ	426	127	2,382	1,029	229	100	4,293
11A 11B NUMBER ALLOTS MIX VC	128	62	1,896	598	591	17	3,292
10A 10B NUMBER ALLOTS HR VC	m	_	93	48	19	89	172
R NUMBER N S ALLOTS A VC SHP VC H	18	22	496	375	261	28	1,246
BA BB NUMBER ALLOTS CAT VC	757	429	7,932	4,555	2,394	403	,029 155,757,348
7 GROSS ACRES IN ALTS		1,713,232	,247,8	79 48,434,818	2,394 69,001,959	1,465,089	29 55,757,3
GROSS ACRES IN CNTY	944,260 894,367	1,809,326	35,714,386	52,581,879	80,724,590	2,342,588	174,117,029
PRICE AREA	-	2	m	4	ى د	9	

Size 15A = 2,001 - 10,000 Size 19A = over 1,000,000 Size 14A = 641 - 2,000 Size 18A7 = 500,000 - 1,000,000 Size 13A = 160 - 640 Size 17A = 100,000 - 500,000 *SIZE CLASSES, IN ACRES: Size 12A = 0 - 160 Size 16A = 10,001 - 100,000

Ownership Pattern

These are scattered, intermingled, solid block, and a mix of scattered tracts and solid blocks. The tracts within the scattered pattern of ownership are primarily the remnants of the original public domain lands (BLM) that were left after the majority of the public lands in the area were patented under a variety of settlement laws. The tracts in this ownership pattern under BLM administration are usually located outside of the boundaries of the established grazing districts.

The intermingled pattern of ownership describes those areas in which the public rangelands (mostly public lands administered by BLM) are intermingled with lands owned by railroads, timber companies, or private individuals. More often than not, the ownership is in an alternate section configuration. In some isolated instances, ownership is in as small as an alternate 40-acre pattern.

In terms of total acreage, the majority of the public rangelands are in the solid block pattern of ownership. This pattern would apply to the majority of the public lands (RIM) and the National Forest lands. Even in these solid blocks, there often are small scattered tracts under private ownership that were patented as homesteads or mining claims. Within the solid blocks of lands administered by BIM, there are fairly regular patterns of state lands given to the states under laws granting statehood.

The mixed, scattered, and solid block pattern of ownership describes the balance of public lands (BLM), National Forest lands, and National Grasslands. Lands in these areas were frequently reacquired by the Federal

Government through purchase or exchange, while other lands are currently involved in ongoing exchange or disposal programs.

Within any of these four types of land patterns, there are instances in which the federal lands of all three categories—public lands (BLM), National Forest lands, and National Grasslands—join or are intermingled. There are numerous Memorandum's of Understanding and Interagency Agreements between the administering agencies under which one agency handles grazing or other administrative duties for the other agency.

Access to Public Rangelands

Because of the ownership patterns of public rangelands, the status of legal and physical access to individual allotments or tracts varies greatly. Within the scattered pattern of ownership, many tracts or allotments are surrounded by lands under other ownership and there is no existing legal access. This situation exists for smaller tracts in particular. Other tracts are bordered by, or crossed by, public roads of different types and quality. Physical access may be limited to horse or 4-wheel drive trails.

In areas of intermingled ownership, access roads of various types and quality have been established and/or maintained by any of the involved owners or their predecessors or by local governmental bodies. Generally, the federal agencies and other landowners "co-exist," using these roads to carry on their operations without any serious questions being raised as to the legal status of the roads. Problems may arise if use by third parties, such as hunters, recreationists, loggers, mineral exploration companies or developers and others, becomes significant or inordinate. In these instances, the federal agency involved may acquire legal access if the need for public access is sufficiently justified. The federal agency may obtain legal access either through negotiations or by exercise of its power of eminent domain.

Even in the solid block patterns of federal ownership, there can be problems of legal access to specific allotments or portions of the solid blocks. During the early settlement of the West, settlers first claimed lands along drainages and other natural routes of travel. As the surrounding areas were settled, a network of public roads developed along the more populated natural routes, crisscrossing and outlining sections of public and private lands. Although public roads do cross solid blocks of public rangelands at some points, portions of the blocks are separated from the public road systems by lands of other ownerships. In some instances, physical and topograhic features make it literally impossible to gain access to some areas within these blocks from the public roads which cross the blocks. In other instances, although it would be physically possible, the length and circuitous nature of the route makes it impractical or at least undesirable. Again, as in the case of the intermingled ownerships, the agencies and the involved landowners have used existing roads and trails to carry out their operations without significant problems over access. As third party use increases, however, problems do arise.

Historically, permittee/user access to the public rangelands has not been a significant issue in any of the four ownership patterns. The primary reason probably is that, for the most part, the permittees/users are also the owners or the authorized users of the lands which adjoin or surround the public rangelands. For public lands (BLM), this situation results from the provisions of the Taylor Grazing Act that established grazing preferences. Under that Act, grazing preferences were to be allocated first to existing livestock operators who, among other conditions, had base property adjoining or near to the public lands (BLM).

Many permittees' base properties or bases of operation surround, are adjacent to, intermingled with, or are surrounded by federal tracts or allotments. In these situations, the movement of livestock to the allotments consists merely of opening a back gate and allowing the livestock access to the allotments. Other permittees are located many miles away and "turnout" requires either trucking or trailing the livestock to the allotments.

Topography of the Public Rangelands

Because of their vast size and expanse, the public rangelands exhibit examples of literally all of the recognized land forms. The elevations on these lands range from below sea level to as much as 12,000 feet. The surfaces of the tracts or allotments vary from level to rolling to hilly to steep to mountainous and precipitous, and show combinations of any of these types. The National Grasslands are generally more moderate or gentle in their surface expressions. The lands administered by BLM and the National Forest lands have vast areas of all of the surface descriptions just described. Portions of the lands included within some of the tracts or allotments can be so steep or precipitous, broken by drainages, rock outcroppings, or lava flows that they are entirely unsuitable for livestock grazing. (See Exhibit 2 in Addenda, "Relief Map")

Vegetation Cover and Forage Quality

The public rangelands support all of the natural vegetation types known to the West plus many of the domesticated types introduced during the past 40 to 50 years. The National Gras'slands and scattered tracts of public (BLM) and National Forest lands in the upper Missouri Basin and Great Plains areas support moderately dense cover of various compositions of wheatgrasses (both native and domesticated varieties), needle grasses, grama and bluestem, several varieties of clover, and other domestic plants.

Some areas of the public rangelands support sparse stands of native grasses, which must compete with the primary vegetation types such as the sagebrushes, creosote, chapparral, saltbush, greasewood, palo verde, pinyon-juniper and other shrubs. The lands in some of these areas have, through revegetation and plant manipulation projects, been altered significantly from their native state. Both the quantity and quality of the forage available for livestock use have been increased substantially. Other areas are wholly or partially covered by "dark timber" to the extent that livestock grazing is limited to open hillsides and drainage bottoms (see Exhibit 4 in Addenda, map entitled "Vegetation").

Forage quality on these lands as indicated by the estimates of carrying capacities, varies substantially from area to area and tract to tract. The estimates of carrying capacity range from as good as less than 1 acre/animal unit month (AUM) to as poor as more than 99 acres/AUM.

Availability and Distribution of Livestock Water

Water for livestock grazing purposes on the public rangelands is supplied by a multitude of natural and developed sources. The sources include rivers, streams, natural and developed springs or seeps, natural ponds, developed reservoirs or tanks, catchments, irrigation ditches, wells, and snow. The methods of distribution from these sources include ditches, pipelines to watering troughs, pipelines to intermediate storage tanks with secondary distribution systems, hauling by tank trucks directly to permanent or temporary watering troughs, or to storage tanks for distribution through pipelines.

The availability and distribution of livestock water in individual areas are extremely variable. Many of the smaller tracts in the areas of scattered

ownership have no onsite source of water. The livestock must walk to a source on the adjoining or surrounding lands for water. On some, water has been piped to the tract. Others have a good, reliable onsite source of water, either natural or developed.

In areas of intermingled ownership, the source(s) of water can be on any of the involved ownerships. The livestock may walk to these sources, or systems of pipelines and tanks may have been developed to distribute water across the ownerships, at least to some degree.

Even in the areas of solid blocked ownership, the primary sources of water may be on the scattered smaller private or state ownerships. In any of the different types of ownership patterns the sources of water and the distribution systems may have been developed entirely by the grazing users, in cooperation with the agency involved or entirely by the agency.

The distribution of water on the individual tracts or allotments varies. Using a scale developed by the appraisers based on input from industry, distribution may be excellent, meaning that all of the lands within the allotment are within one mile of water, to all water being offsite. In the offsite category, the livestock must either walk to the source or the water must be transported to the allotment. The scale includes other gradations such as good, meaning all of the lands in the allotment are within 1.5 miles of water; fair, within 2 miles; or poor, 2.5 miles or greater from water. Then there are winter sheep allotments in which snow serves as the source of water.

Construction and Maintenance of Improvements

The introduction of a wide variety of "improvements" to the public rangelands began with the earliest grazing use. Many of the improvements or land treatment practices, however, were done for purposes other than to simply increase the quantity and quality of forage for livestock grazing or to facilitate use by domestic livestock. These other purposes include erosion control or reduction by both wind and water, increased water retention capabilities, reduction in sedimentation of streams and rivers, wildlife and fishery habitat improvement, facilitating migration of fish and wildlife, protection of fish and wildlife breeding grounds, control of wildfires, revegetation following wildfires, control or elimination of undesirable toxic or noxious plants, and others.

Improvements and treatments designed to increase the forage quantity and quality and to facilitate use by domestic livestock include:

Access roads
Exterior boundary fences
Allotment boundary fences
Interior division fences
Cattle guards
Grazing systems
Holding corrals and pens
Loading chutes
Dipping vats and oilers

Wells and springs
Pipelines and ditches
Reservoirs, dams, and tanks
Watering tanks and troughs
Catchments
Spraying plants and shrubs
Pinon-Juniper removal
Controlled burns

The when, where, by whom, and at whose initial expense these improvements were made present an extremely complicated picture. Some allotments have received almost all of the types of improvements just described, while others have received no improvements at all. There are numerous allotments on the public rangelands on which all of the improvements have been made by the agency. At the same time, there are other allotments in which at least the majority of the improvements have been made by the permittees. Many of the smaller tracts or allotments in the areas of scattered ownership are unfenced, have no

access, and no onsite source of water. Improvements on these tracts frequently have been placed there by the permittee, with or without authorization.

Both the FS and the BLM are authorized to allow permittees to place certain types of improvements on the public rangelands. On National Forest lands and National Grasslands, ownership of any such improvements rests with the United States (36 CFR 222.9(b)(1) through (4)).

Permittees/lessees may hold ownership to improvements placed on the public lands (BIM). Under 43 CFR 4120, permittees/lessees may install, use, maintain, and/or modify range improvements at their own expense under a range improvement permit. The permittee/lessee holds title to removable range improvements authorized under these permits. If the permit/lease and grazing preference is canceled in whole or in part, the United States compensates the permittee/lessee for the fair market value of the improvement. If the grazing preference is transferred, the transferee is required to compensate the transferor for the fair market value of his or her interest in the improvement.

Financing of Improvements

Improvements, including land treatments, are financed from a variety of single and combined sources. Sources include funds annually appropriated by Congress and expended by the agency, contributions in funds and labor from the permittees, and contributions of funds and materials from other entities such as a state wildlife agency and advisory board funds. The advisory boards derive their funds from the portion of the grazing fees that are returned to the state or local county for range improvements. These funds are spent in a manner similar to improvement funds appropriated to the agencies.

The BIM's policies regarding permittee—constructed and financed improvements have varied from state to state and from time to time. A check of the records of improvements will show that in some states, during certain periods of time, all improvements were made by the agency. At the same time, in other states, the majority of the improvements were being made by the permittees. It appears that these differences stem from the interpretation of policy by the incumbent State Director and/or district managers and changed with changes in personnel. The availability of funds appropriated to the agency for range improvements also may have caused differences. All of the information available to the appraisers indicates that individual permittees have contributed anywhere from zero to 100 percent of the cost of improvements on their allotments during the past 40 to 50 years.

The situation regarding maintenance of range improvements is equally diverse. The percentage of maintenance performed by the permittees has varied from time to time, and from jurisdiction to jurisdiction. Again, it appears that the percentage of maintenance performed by individual permittees during the past 40 to 50 years varies from zero to 100. As of the date of value, these percentages range anywhere from 10 to 100 percent. The present policies of both BLM and FS are that the permittees are responsible for maintaining improvements that primarily facilitiate livestock grazing. The BLM and FS will continue to maintain improvements that primarily serve other multitple uses.

Contributions by permittees for improvements has not necessarily supplemented federal financing of range improvements. In general, the Federal Government has either directly or indirectly paid for all improvements on the public rangelands and most improvements on the National Grasslands through reductions in the grazing fee. The \$1.23 base price for grazing on public rangelands used in both the 1969 grazing fee formula and the 1978 PRIA grazing fee

formula has given the permittees/lessees credit for the dollars, labor, and materials that they have invested in improvements and maintenance of improvements on the BLM and FS allotments. 1/ Permittees on both FS and BLM lands included in certain Experimental Stewardship Areas may also have received up to a 50 percent credit against the grazing fee for range improvement work. This credit has been in addition to that already received through the grazing fee formula.

On the National Grasslands, the "payment in kind" process of deducting costs of "required conservation practices (range improvements)" from grazing fees has given the grassland permittees credit for most improvements they have made.

^{1/ &}quot;Study of Fees for Grazing Livestock on Federal Lands: A report from the Secretary of Agriculture and the Secretary of the Interior," October 21, 1978, p. 2-20.

Individual Use Situations

More than 30,000 permittees or operators graze their livestock on the public rangelands. In 1983, the number of AUM's authorized to individual permittees ranged from 1 AUM to over 107,000 AUM's. Table SLD-3 gives a breakdown of the number of operators in different use size classes.

Table SLD-3.

Number of Public Rangeland Operators

In Different Size Classes, By Administrative Category

SIZE CLASS AUMs(BLM) AMs (FS)	NUMBER BLM	OF OPERATORS	IN SIZE CLAS	SSES*	% OF TOTAL OPERATORS
0**	624	130	2	756	2.4%
1-100	8,942	244	270	9,456	29.6%
101–500	7,562	3,782	558	11,902	37.2%
501-1,000	2,098	1,542	294	3,934	10.6%
1,001-2,000	1,577	947	177	2,701	8.4%
2,001-3,000	603	391	99	1,093	3.4%
3,001-4,000	298	223	328	524	1.6%
4,001-5,000	170	149	9	328	1.0%
5,001-15,000	357	174	76	607	1.9%
15,001-25,000	39	20	395	454	1.4%
25,000 PLUS	23	8	186	217	0.7%
TOTALS	22,293	7,610	2,069	31,972***	100.0%

^{*} A permit may be issued to a single operator or to a grazing association with several member operators.

^{**} Operators having ephemeral permits and trailing permits.

^{***} Another counting of operators westwide is given as 33,632.

The four charts which follow contain the summaries by price area of the information contained on Format 2 of the Public Rangeland Data Summaries. The first shows lands administered by BLM; the second, National Forest lands; and the third, National Grasslands; and the fourth is a summary of all public rangelands. Additional charts showing the summaries by county by state are in Exhibit 6 of the Addenda.

PUBLIC RANGELAND DATA SUMMARY FORMAT 2

LANDS ADMINISTERED BY BLM BY PRICE AREA

PRICE AUM												
2 0 243 94 44 44 21 11 8 6 0 0 3 260 4,513 3,334 947 597 222 62 53 81 4 1 4 48 2,549 2,701 615 443 192 99 52 124 10 16 5 295 764 1,041 410 442 160 126 54 143 25 6 6 21 289 125 17 14 3 0 1 3 0 0		OPS AUM										
3 260 4,513 3,334 947 597 222 62 53 81 4 1 4 48 2,549 2,701 615 443 192 99 52 124 10 16 5 295 764 1,041 410 442 160 126 54 143 25 6 6 21 289 125 17 14 3 0 1 3 0 0 BIM	1	0	584	267	65	37	5	0	2	0	0	0
4 48 2,549 2,701 615 443 192 99 52 124 10 16 5 295 764 1,041 410 442 160 126 54 143 25 6 6 21 289 125 17 14 3 0 1 3 0 0 BLM	2	0	243	94	44	44	21	11	8	6	0	0
5 295 764 1,041 410 442 160 126 54 143 25 6 6 21 289 125 17 14 3 0 1 3 0 0 BLM	3	260	4,513	3,334	947	597	222	62	53	81	4	1
6 21 289 125 17 14 3 0 1 3 0 0 BLM	4	48	2,549	2,701	615	443	192	99	52	124	10	16
BLM	5	295	764	1,041	410	442	160	126	54	143	25	6
	6	21	289	125	17	14	3	0	1	3	0	0
		624	8942	7562	2098	1577	603	298	170	357	39	23

PUBLIC RANGELAND DATA SUMMARY FORMAT 2

NATIONAL FOREST LANDS BY PRICE AREA

PRICE AREA	24A OPS AUM 0	24B OPS AUM 1	24C OPS AUM 2	24D OPS AUM 3	24E OPS AUM 4	24F OPS AUM 5	24G OPS AUM 6	24H OPS AUM 7	24I OPS AUM 8	24J OPS AUM 9	24K OPS AUM 10
1	0	77	215	59	31	9	5	3	0	0	0
2	0	15	6	2	2	1	1	0	0	0	0
3	31	964	1,641	692	371	109	52	29	44	7	3
4	62	721	1,118	434	260	146	79	64	40	12	0
5	32	438	817	332	274	126	85	52	89	1	5
6	5	91	194	80	38	8	5	4	1	0	0
NF TOTALS	130	2244	3782	1542	947	391	223	149	174	20	8

PUBLIC RANGELAND DATA SUMMARY FORMAT 2

NATIONAL GRASSLANDS BY PRICE AREA

PRICE AREA	24A OPS AUM O	24B OPS AUM 1	24C OPS AUM 2	24D OPS AUM 3	24E OPS AUM 4	24F OPS AUM 5	24G OPS AUM 6	24H OPS AUM 7	24I OPS AUM 8	24J OPS AUM 9	24K OPS AUM 11
1	0	20	149	106	44	0	0	8	34	251	134
2	2	62	142	23	5	56	1	0	39	128	52
3	0	167	237	165	125	43	2	1	3	0	0
4	0	21	30	0	3	0	0	0	0	16	0
NGL TOTALS	2	270	558	294	177	99	3	9	76	395	186

PUBLIC RANGELANDS FORMAT 2 SUMMARY

	24A OPS AUM 0	24B OPS AUM 1	24C OPS AUM 2	24D OPS AUM 3	24E OPS AUM 4	24F OPS AUM 5	24G OPS AUM 6	24H OPS AUM 7	24I OPS AUM 8	24J OPS AUM 9	24K OPS AUM 10
BLM TOTAL	624	8942	7562	2098	1577	603	298	170	357	39	23
NF TOTAL	130	244	3782	1542	947	391	223	149	174	20	8
NGL TOTAL	2	270	558	294	177	99	3	9	76	395	186
PRLNDS TOTAL	756	11456	11902	3934	2701	1093	524	328	607	454	217

SIZE CLASSES, IN AMS/AUMS

Size $24A = 0$	Size 24E = 1001 - 2000	Size $24I = 5001 - 15000$
Size $24B = 1 - 100$	Size 24F = 2001 - 3000	Size 24J = 15001 -25000
Size 24C = 101 - 500	Size 24G = 3001 - 4000	Size 24K = 25001 +
Size 24D = 501 - 1000	Size 24H = 4001 - 5000	

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HIGHEST AND BEST USE

In appraisal terminology, the highest and best use of a property is described as "that reasonable and probable use that will support the highest present value, as defined, as of the effective date of the appraisal."

In this appraisal, the concept of highest and best use does not apply. The appraisal considers only one of the possible uses of the public rangelands, that of livestock grazing.

APPROACHES TO VALUE

Income Approach to Value

In normal appraisals, the Income Approach is a procedure that is used to convert anticipated benefits (dollar income or other benefits to the landowner) into a value estimate for the property under appraisal. In this approach, the landowner's typical expenses are deducted from the landowner's typical gross income to arrive at a typical net income to the landowner. This net income is then capitalized into an indication of the value for the property.

The purpose of this appraisal is, in essence, to estimate the fair market rental that is due to the landowner (the United States and the public who own the public rangelands) for the right to graze on the public rangelands. The purpose is not to estimate the value of the lands being grazed.

A modified Income Approach has been suggested for use in estimating the fair market value of grazing on the public rangelands. This modified approach is

based on the <u>user's</u> (permittee's) position. It starts with the <u>user's</u> gross income, based on the portion of the permittee's livestock operation on public rangeland. The permittee's expenses that also are attributable to the portion of the operation on public rangelands are deducted from this amount. The residual amount, which may be a negative figure, is supposed to represent the amount due to the landowner. In this case, the landowner would be the United States and the public. Such an approach would be based solely on the <u>user's ability to pay</u>, and not on fair market value to the owner. The result would be a value-in-use to a particular individual, not a value-in-exchange as contemplated in fair market value.

The Income Approach is not applicable in this appraisal and therefore is not considered nor presented in this report.

Cost Approach to Value

The Cost Approach, as used in normal appraisals, is a procedure in which the estimated value of the land, as if unimproved, is added to the contributory value (depreciated value) of improvements (buildings, etc.) to arrive at an estimated value for the entire property. Again, as just described in the Income Approach, the purpose of this appraisal is to estimate the fair market rental value of the right to graze livestock on public rangelands, and not to estimate the value of the lands.

The modified Income Approach described above has sometimes been called a cost approach, presumably because it considers the user's cost of operating on the public rangelands. The Cost Approach is not applicable in this appraisal and, therefore, is neither considered nor presented in this report.

Market Data Approach to Value

As used in normal appraisals, the Market Data Approach is a process of comparing sales of similar properties to the property under appraisal. This latter property is typically called the subject property because it is the subject of the appraisal. The appraiser makes adjustments for differences between the subject and sales properties to arrive at an estimate of the fair market value of the subject property. In situations involving properties that are commonly bought and sold, the market data approach usually produces the most reliable estimate of value. It is based on the principle of substitution which holds that a buyer is not justified in paying any more for a property than it would cost the buyer to acquire an equally desirable substitute property. It reflects the demonstrated actions of buyers and sellers in the market.

In some instances, the purpose of the appraisal is to estimate the value of the right to use a property for a specified use. When this is the case, the market data approach is based on the comparison with transactions involving the same or similar rights to use other comparable properties. The principle of substitution would apply in that a potential user would be justified in paying no more for the right to use the property for the specified use than it would cost him or her to pay for the same right to use a comparable property.

The market data approach to valuing a right to use can be used to derive an estimate of value in terms of an annual rental, a lump sum value for a specified period of time.

The appraisal described in this report relies solely on the market data approach.

MARKET INVESTIGATION

Background

Section 12(b) of the PRIA (Public Law 95-514 of 1978) requires that by December 31, 1985, the Secretaries of the Departments of Agriculture and the Interior report to Congress on their evaluation of the fee established by Section 6 of the Act, other grazing fee options, and their recommendations to implement a grazing fee schedule for the 1986 and subsequent grazing fee years. One report requirement imposed on the Departments by the Congress was that they use the 7-year trial period established for fee to "improve their data base on the value of the public grazing lands in comparison to private grazing lands."

In February 1982, the FS and the BLM made a decision to use agency staff appraisers to conduct an appraisal of the public rangelands, using the market data or comparable transaction approach to estimating the value of the lands for grazing.1/ The two agencies further decided to contract for the services of professional fee appraisers or organized appraisal groups or societies to perform a review of the completed appraisal.

The appraisal would be conducted jointly by the BLM and the FS, with one Co-Leader Appraiser selected from each agency. Senior field appraisers selected from the two agencies would seek out and verify grazing use transactions. The field appraisers would also aid the Co-Leader Appraisers in examining the lands involved in the transactions and in analyzing the data

^{1/2} See Exhibit 7 in the Addenda for a discussion of the appraisal pretest, conducted by the agencies prior to selecting this appraisal procedure.

collected. The individual county would be the base unit for compiling data on private grazing land lease transactions and data involving use of comparable grazing lands administered by the BLM and FS.

Because the appraisal would involve the gathering of information from private individuals, the agencies had to obtain prior approval from the Departments of Agriculture and Interior and the Office of Management and Budget (OMB). Prior approval of the contents and format of the data form meant that the questions to be asked and the scope of the survey could not be changed from that which was presented and approved by the OMB. The data collection form entitled "Grazing Rental Data Field Information Sheet" carries the OMB No. 0596-0075 and an expiration date of June 30, 1984. This form also carries an instruction that questions are to be answered to the best of one's knowledge and that response to the survey is voluntary and not required by law.

Scope of the Appraisal

During the 17-month period from July 1, 1982, until November 25, 1983, the field appraisal staff (see Exhibit 8) conducted the appraisal in an area embracing 354 counties in the 17 western States. 1/. Field work included the:

(1) collection and verification of information on grazing use transactions involving lands under any ownership within the assigned counties; (2) examination of a representative sample of the properties involved in grazing use transactions within each county; and (3) collection of data pertaining to the general physical, social, economic, and livestock related factors in each county.

¹/ Although the PRIA refers to the public rangelands in the 16 western States, the public lands administered by the BLM, and the National Forest lands and the National Grasslands administered by the FS, are actually located in 17 of the western States. National Grasslands are located in two counties in Texas.

A conservative estimate is that, in gathering this information, the field appraisers contacted and/or interviewed more than 100,000 persons. Although the appraisers did not obtain information on 100 percent of the available transactions, they did obtain information on at least 80 to 90 percent of the representative transactions in each county.

Field Examination

The Co-Leader Appraisers, accompanied by the field appraisers, conducted field examinations of a portion of the total number of properties involved by grazing use transactions in each county. They also examined a cross section of the public rangelands. Because of the vast expanse of the public rangelands and the market search area, the Co-Leader Appraisers were forced to conduct the majority of these field examinations using airplanes, flying from 500 to 1,000 feet above the land surface. They took oblique photographs of representative transaction properties and the public rangelands during these flights. Again, because of the vast expanse of the area to be covered, they were forced to divide the total area into sections. The aerial examinations of a few of the sections were made jointly by the Co-Leader Appraisers. The remaining sections were examined by only one or the other of the Co-Leader Appraisers. The end result has been that every county within the market search area has been aerially examined by one or both of the Co-Leader Appraisers, accompanied by the field appraisers who worked the county.

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Description of Data Bases

General Economic Data

During the course of their work in each county, the field appraisers collected and interpreted general and specific information pertaining to the livestock industry. The information collected for each county included data on physical characteristics and ownership patterns of lands within the county, populations (people and livestock), climate, the general economy, trends and conditions pertaining to the livestock industry, opinions of those persons active in the production of livestock, taxes, the value (selling prices) of BLM and FS grazing privileges, rates of return on native grazing lands, and a general description of how grazing use transaction data were gathered. This information was combined with a summary of the field appraisers' findings.

This general economic data was gathered from Planning and Zoning Commissions, Chambers of Commerce, County Assessors, available published materials, county extension agents, lending institutions, and others involved in, or knowledgeable of the local livestock industry. The appraisers prepared narrative summaries of this information following a format called the County Summary Format (See Exhibit 9).

The general economic data base consists of 354 narrative reports ranging from 3 to 10 pages each and tabular summaries of the information collected. One tabular summary has the information for each county on a single line, with each item of information appearing in the appropriate column. This summary includes totals or averages for each column (where such are meaningful) for each of the 17 states. The second tabular summary lists state totals on a single line with the 17 state totals and averages on the bottom line. The tabular summaries, by county, are found in Exhibit 9 of the Addenda to this report. The state summary follows:

DEFINITIONS AND CODES FOR COUNTY DATA SUMMARY

- 1. STATE AND COUNTY CODE FOR ENTRY
 - 2. TOTAL NUMBER OF SQUARE MILES OF LAND AREA IN COUNTY
- 3. TOTAL NUMBER OF OTHER FEDERAL ACRES (000s) IN COUNTY 4. TOTAL NUMBER OF ACRES OF LAND ADMINISTERED BY USFS IN COUNTY
- 5. TOTAL NUMBER OF ACRES OF PUBLIC LAND ADMINISTERED BY BLM IN COUNTY
- 6. TOTAL NUMBER OF ACRES COMBINED ADMINISTERED BY BLM & FS IN COUNTY
- , TOTAL NUMBER OF ACRES OF STATE LANDS IN COUNTY
- 8. TOTAL POPULATION OF COUNTY (000s)(1980 CENSUS)
- URBAN POPULATION OF COUNTY (000s) IN CITIES MAYING POPULATIONS OF 3000 OR MORE (1980 CENSUS)
- 10. POPULATION DENSITY IN NUMBER PER SQUARE MILE OF LAND AREA
- 11. HOW LIVESTOCK INDUSTRY RAHKS IN ORDER OF CONTRIBUTION TO OVERALL ECONDMIC BASE OF COUNTY
- 12. NUMBER OF CATTLE IN COUNTY (000s) BLANK-NO DATA AVAILABLE
- 13. NUMBER OF SHEEP IN COUNTY (000s) BLANK=NO DATA AVAILABLE)
- 14. PREDOMINANT TYPES OF LIVESTOCK OPERATIONS IN COUNTY 1=COW/CALF 2=YEARLING/STOCKER 3=MIXED 4=SHEEP
- 15. TYPICAL SIZE OF CATTLE HERDS IN COUNTY 1*50 to 100 2=101 to 250 3=251 to 500 4=MDRE THAN 500
- 16. TYPE OF ANIMAL COMMONLY MARKETED 1-CALVES 2-YEARLINGS 3-TWO YEAR OLDS 4-LA4BS 5-WETHERS

- 7. GRAZING SEASON ON NATIVE RANGE LANDS 1-SPRING 2-SUMMER 3=FALL 4-WIN
- 1-SPRING 2-SUMMER 3-FALL 4-WINTER 5-YEARROUND 6-SPRING-SUMMER 7-SPRING-FALL 8-SUMMER-FALL 9-WINTER-SPRING
- SOURCE OF HAY 0=NONE NEEDED 1=GROWN ON RANCH 2=GROWN IN COUNTY 3=INPORTED FROM OUT OF COUNTY

18.

- 19. NUMBER OF MONTHS STOCK ARE FED HAY, ETC.
- 20. METHIDD/LOCATION WHERE LILVESTOCK IS MARKETED. 1*LOCAL COUNTY AUCTION
 2*PRIVATE TREATY ON RANCH
 3*OUT-OF-COUNTY AUCTION LESS THAN 50 MILES
 4*OUT-OF-STATE AUCTIOM MORE THAN 50 MILES
 5*TY AUCTION
- 21. MONTH LIVESTOCK IS MARKETED O= NOT DEFINITE OR VARIES 1=MARCH 2*APRIL 3= MAY 4=JUNE 5=JULY 6=AUGUST 7=SEPTEMBER 8=OCTOBER 9=NOVEMBER
- ANNUAL PRECIPITATION 1=LESS THAN 6" 2=6" to 10" 3=10' to 14' to 18" 5=18" AND GREATER

22.

- 23. CLIMATIC TYPE 1=COASTAL(WINTER RAINS) 2=CONTINENTAL(SUMMER RAINS)
- 24. LENGTH OF GROWING SEASON IN NUMBER OF DAYS
- 25. YALUE OF FEDERAL PERMITS IN \$/AUM (000=NO DATA COLLECTEO)
- 26. GROSS RATE OF RETURN ON GRAZING LAND INVESTMENTS IN PERCENTAGE
- 27. TYPICAL MARKET VALUE OF RANCHES PER CYL (00000-NO DATA COLLECTED)
- 28. GENERAL CONDITION OF LIVESTOCK INDUSTRY IN COUNTY
 1=MOST RANCHES MAKING MONEY 2=MOST EFFICIENT OPERATORS MAKING MONEY
 3=MOST OPERATIONS HARGINAL 4=MANY OPERATIONS SUBMARGINAL
 5=WIDE SPREAD FORECLOSURES

COUNTY DATA SUMMARY

COND LYSK INDY GRZ HAY MON MTD NKT PCP CLI IN FEDL OF RNCHS SEA SRC FED SAL NON IN" TYP DAYS PERM RTRN /CYL 26 GR0S 24 GR0 23 22 2 20 18 19 17 TYP IIRD TYP LSK SIZ ANL G OPR CAT MKD S 14 15 16 IN CNTY (U00s) 13 #SHEP (000s) 12 #CATT DENS PER SQ MI POPUL 3000+ (000s) 9 URBAN B TOTAL UPOPUL (OF CTY (000s) 6 7 1 107AL TOTAL 1 COMBD STATE F BLM-FS ACRES C (000s) (000s) (000s) 5 TOTAL BLM ACRES (000s) 4 TOTAL USFS ACRES (000s) 3 OTHER FEDRL ACRES (000s) SQ MI IN CNTY 2 TOTAL AREA ST/C0 COUNTY DATA
SUMMARIZED BY STATE

									1									9
28 COND LVSK INDY	8	2.7	2.7	3.2	2	2.9	2.2	2.8	2.8	က	т	ო	2.9	2	2.9	m	2.9	
27 MKTVAL RNCHS /CYL	1900	4100	4100	3400		3200	1600		1863				4500	3000	2667		1900	
26 GROS RATE OF RTRN	_	1.8	1.8	1,3	m	2.25	4.8		2.4	1.6	2	2	1.4	m	1.8	1.6	2.7	
25 AVG VALU FEDL PERM	114	220	75	09		920	140	040	103	053		056			135		049	
13 EST #SHEP IN STATE	139000	367000	377000	166000		188000		41000	398000	10000		00099			454000	35000	000889	2929000
12 EST #CATT IN STATE	366000	1070000	1177000	522000	0009	1504000		142000	753000	108000	63000	494000			000069	301000	809000	6935000
LS IND	4	8	3	4.4	er e	2.4	_	4.7	4.1	2.9	1.5	3.1	1.3	2	4.4	3.6	4.1	
10 POPUL DENS PER SQ MI	026	060	018	ווס	005	005	002	800	011	004	003	200	007	004	018	014	900	025
9 URBAN CITIES 3000+	1984000	12141000	811000	411000		285000	7000	394000	724000	0006		169000	00069	4000	1130000	72000	278000	18489000
8 TOTAL POPUL OF CTY	2707000	14471000	1363000	869000	3000	651000	22000	810000	1200000	45000	2000	530000	152000	7000	1462000	346000	481000	25121000
7 TOTAL STATE ACRES	9133000	1826000	2052000	2581000		4546000	289000	3000	8233000	211000	249000	776000		0006	3785000	1209000	3386000	38259000
6 TOTAL COMBD BLM-FS ACRES	20996000	32711000	22917000	35365000	108000	25773000	471000	54126000	21850000	1102000	48000	23111000	3489000	77000	29805000	5372000	26249000	303570000
3 OTHER FEDRL ACRES	23357000	8068000	1241000	1223000		4781000	79000	3024000	10751000	373000		105700			5065000	2713000	3310000	65042000
TOTAL AREA IN ACRES	66251000	102698000	52445000	52301000	464000	83937000	7224000	68953000	00088669	6925000	1908000	45461000	14362000	956000	52698000	16063000	53875000	651222000
2 TOTAL AREA SQ MI IN CNTY	103517	160466	81945	81720	725	132151	11287	107739	109355	10820	2982	71033	22440	1494	86341	25099	84179	1017534
1 STATE	ARIZ	CALIF	0700	IDAHO	KANSAS	MONT	NEBR	NEV	NEW M	N.DAK	OKLA	OREG	S.DAK	TEXAS	UTAH	WASH	WYO	TOTALS

Public Land Data Base

Field offices of the two agencies compiled the information providing the details of grazing on the public rangelands. This information was compiled on a county-by-county basis for each of the three administrative categories of public rangelands. The data base includes information on public rangeland grazing within 415 counties. Some counties have lands within only one administrative category, while other counties have lands within two or three of the categories. The following chart identifies the number of counties, by state, in which grazing use is authorized for each administrative category:

NUMBER OF COUNTIES, BY STATE, IN EACH PUBLIC RANGELAND
GRAZING ADMINISTRATIVE CATEGORY

	BLM-administer	ed FS-administered							
State	Public Lands	National Forest Lands	National Grasslands						
		No. of Counties-							
AZ	13	13							
CA	44	38							
CO	48	36	4						
ID	43	33	1						
KS	4		2						
MT	47	34							
NE	10	5	2						
NV	15	13							
NM	31	20	4						
ND	15		8						
OK	9		2						
OR	22	23	1						
SD	13	6	7						
TX			2						
UT	23	27							
WA	17	13							
WY	24	19	3						
TOTALS	378	280	36						

Transaction Data

Field appraisers recorded the information on grazing use transactions on two types of forms: one for "negotiated" leases, and the second for "administrative" leases. The form for "negotiated transactions" contained spaces for the field appraisers to record the results of their field examinations of the representative properties. The field appraisers used uniform "dictionaries" that explained the entries that were to be made on the appropriate forms. (See Exhibit 10 in the Addenda for a complete description of the procedures, forms, dictionaries, and other documents used by the field appraisers.)

The two "categories" of transactions are defined as follows:

Negotiated:

Transactions in which the parties involved set the price, terms, and conditions for use, presumably considering the specific physical attributes of the property for grazing purposes.

Administrative: Transactions in which the landowner, usually a governmental or quasi-government body or corporation, administratively sets the price, terms, and conditions to be applied uniformly to their lands for grazing use. The price does not vary to reflect the relative physical attributes of specific properties.

The information on the field forms was then transferred to computer input forms for entry into the computer transaction data base. The transaction data base consists of 11,675 records. Each record is identified by a unique state-county-lease number code. These records contain information pertaining to 11,039 negotiated leases and 36,283 administrative leases. Administrative records may contain anywhere from 1 to 1,000 individual leases when the conditions of the leases are the same. These leases involve over 103,536,000 acres of lands, under numerous different ownerships including federal, state, county, municipal, railroad, corporate, and private. The records are stored by county within each state.

Many of these records contain information that was given to the appraisers with the understanding that the information was to remain confidential. Because of this request for confidentiality, the computerized records of the transactions do not include names or addresses of any of the parties involved in the transactions.

A complete description of how the data are stored and processed is given in Exhibit 11 in the Addenda.

Competitive Bid Situations on Public Lands (BLM)

There are two situations involving grazing use of federal lands administered by the BLM in which the fee for the use is established through competitive bidding. These are identified as Fort Meade, South Dakota, and McGregor Range in New Mexico.

The data base contains records of the use and prices on Fort Meade starting with 1973 and projecting through 1986. The records for the McGregor Range start with the 1966-77 grazing season and continue through the 1983-84 season. These competitive bid situations are described further in Exhibit 12 in the Addenda.

Market Data Analysis

Lessor/Lessee Profiles

Participants in the "market" for use of lands for livestock grazing purposes include a large variety of landowners on one side and an even greater variety of livestock owners on the other side. The landowners, who are the sellers or lessors in the market, range from owners of small tracts in "recreational subdivisions" and widows and heirs of original owners of "abandoned homesteads" to the FS and the BLM, which, in terms of total acreage and forage produced, constitute the largest single landowner in the market. Landowners between these two extremes are a multitude of retired and semi-retired ranchers and persons speculating in ownership of rural properties; major corporations, such as railroads and energy companies; and numerous federal, state, county, and municipal governments and quasi-governmental bodies.

The motives of the landowners in renting their lands or selling the forage and in setting the price are as numerous and varied as the types of individuals or entities involved. Many of the smaller landowners, particularly absentee owners, are gaining a caretaker for their properties. Until recently, larger corporate and governmental landowners were citing accommodation of neighbors, having a helpful and cooperative public image, and other intangible benefits as the motives for leasing their lands for livestock grazing. Judging from the number of grazing fee evaluations that were going on concurrently for various of these owners, it appears that many may be changing their motives and philosophies regarding grazing use of their lands in the future. Because of the downturn in the general economy of the country, many of these owners are adopting the approach that any enterprise on their lands must return a profit or at least provide cost recovery.

Other landowners are taking advantage of monetary benefits other than the grazing rental price paid to them. These benefits may be reduced real estate

taxes from having the lands grazed and thus qualilfying for green belt, forest and agricultural preserve programs, etc.

The livestock owners, who are the buyers in the forage market, start with the owners of small farms or ranchettes who have a few cows and calves and rent pasture from a neighbor to supplement the forage which they raise. They raise the livestock to provide meat for their own use or to supplement the income they and their spouses make from working at jobs in town. Next are persons such as the operator of a local bulk fuel outlet who runs a hundred head of yearlings each year and rents forage from wherever it is available, has no base property, and moves from one leased property to the next. Then there are groups or individuals who act as brokers or middlemen between persons who purchase and run livestock solely for tax write-off benefits and the landowners who take in, or "babysit," their livestock. There are a small but apparently growing number of corporations entering the forage market that are simply raising red meat to be sold eventually through their retail outlets. Additionally, there are the full-time ranchers who, for reasons of trying to create an economic unit or gain the economies of scale that come from larger operations, have outgrown their fee lands and are renting forage from wherever it is available. Often, sons or daughters who have remained on the home ranch lease forage for their small herds.

Lease Types

The transactions authorizing the rights to use lands of another for livestock grazing fall into six broad types. These are described as:

Lease of Fee Simple - Authorizes complete use of the entire property including improvements for whatever purpose the lessee choses to devote it to for a specified period of time. No restrictions as to the type or number of animals to be grazed or the season(s) of use.

Payment expressed in terms of total dollars for the term of the lease, dollars per year, or dollars per acre for the year.

- 2. Ground Lease Authorizes use of the entire property for grazing of livestock for a specified period of time. No restrictions or specifications as to the type or number of animals or the season(s) of use. Payment expressed in terms of total dollars for the term of the lease, dollars per year or season, or dollars per acre per year or season.
- 3. Limited Ground Lease Authorizes use of the entire property for livestock grazing but specifies the type and number of animals and the season(s) of use. Payment expressed in terms of total dollars for the term of the lease, dollars per year or season, or dollars per acre for the year or season.
- 4. Grazing Lease Authorizes use of the described property for livestock grazing. No restrictions or specifications as to the type or number of animals or the season(s) of use. Payment expressed in dollars per animal per time frame (AUM, head or pair/day, month, season, or year), or percentage of calf or lamb crop, or price per pound of gain.
- Limited Grazing Lease Authorizes use of the described property for livestock grazing with specifications on the type and number of animals and the season(s) of use. Landowner may enter into similar agreements with other livestock owners to run their livestock on the same property at the same time. Payment expressed in terms of dollars per animal per time frame (AUM, head or pair/day, month, season,

or year), percentage of calf or lamb crop, dollars per pound of gain, or other sharecrop arrangements.

6. Custodial or "Babysitter" - The landowner takes custody of the livestock for a specified period of time and provides all or most all of the day-to-day care. The type and number of animals and the season(s) are specified. Payment is expressed in terms of dollars per animal per time frame (AUM, head or pair/day, month, season, or year), or percentage of calf or lamb crop, dollars per pound of gain, or other sharecrop arrangement.

Pricing Units

The "buyers and sellers" in the private land forage market use a variety of pricing units in the transactions authorizing use of forage. In expressing payment to the landowner, the most commonly used pricing units are:

Dollars/Lease/Season Dollars/Head/Day /Month /Year /Season /Year Dollars/Acre /Season /Year Dollars/Pair/Day /Month Percentage of Calf Crop /Season (Seasonal or Yearly Basis) /Year Percentage of Lamb Crop Dollars/ AU /Month (Seasonal or Yearly Basis)

Dollars/ AU /Month (Seasonal or Yearly Basis)
/Season
/Year Dollars/Pound of Gain/Season
There are number of other pricing units which show up infrequently, such as

dollars/hundred weight of turnout weight/month, etc.

Beef Cattle Prices and Cost of Production: The field appraisers found several transactions, particularly sharecrop arrangements, in which the selling price of calves or steers entered into the final price determinations. These transactions identified the markets to be considered as well as the specific point in time, or a period of time, over which the prices were to be picked.

The selling price was then used to calculate the rental due the landowner.

They found no transactions that made reference to cost of production as an adjustment in arriving at the final price to be paid. In their general discussions with parties involved in transactions (other than BLM and FS permittees), cost of production as an adjustment factor in establishing forage prices was never mentioned.

Major Factors Affecting Price

During the course of the appraisal field work, it became apparent that there were several major factors not related to the physical attributes of the properties being grazed that obviously affected the prices being paid for grazing use. These factors affected the comparability of the transactions to the public rangelands and the weight they were subsequently given in the value conclusions, or provided information that was helpful in deciding on pricing and other units of comparison to use in the valuation. These factors are:

Non-Market Value Transactions: The appraisers asked lessors and lessees two sets of questions aimed at determining if the transactions were market value transactions. In many of the transactions, the lessor was receiving intangible benefits in addition to the stated price. In others, the lessor had some motive other than collecting fair market value in arriving at the price to be charged for the grazing use. In still other transactions, the parties to the transaction were related or had some relationship that indicated that these transactions were not intended to be at fair market value.

Landlord Services: The amount of landlord services being provided on grazing use transactions ranges from none to full "babysitter operations" (take—in operations). Many of the transactions include a wide variety of landlord services. On those in which the landlord does provide some service, the services range from where everything is done by the landlord to as minimum an effort on the landlord's part as providing salt.

In a few areas, transactions were found in which the parties had, in their negotiations, arrived at prices that varied depending on the degree of services provided. If the lessor provided all of the day-to-day care of the livestock, the price was substantially higher than if the livestock owner cared for the livestock.

Since the BLM and the FS do not provide any of the day-to-day care for the animals on public rangelands, transactions which include such care are not comparable.

Animal Type - Animal Unit Definitions - Conversion Factors

There are differences in price for different types of animals being grazed on nonpublic rangelands. In a substantial number of transactions, livestock owners were grazing more than one type of animal and the lease included different prices for the different animals.

The appraisers recorded any definitions or conversion rates that lessors and lessees in the market used to describe the different types of animals in terms of an animal unit or an AUM. If neither the lessor nor the lessee provided a definition, the appraisers entered the definition that was commonly used in that particular local area for the specified type of animal(s).

The information collected shows that the frequency of use of, or even a professed knowledge of, the term Animal Unit Month varies with the presence or absence of FS or BLM permittees in the local area. In locales where use on public rangelands is common, most private forage users/owners were at least somewhat familiar with the term. Some of the parties to transactions in those locales use the AUM as a pricing unit. Generally, these parties rate the cow/calf pair for a month of use as 1 AUM. There are exceptions where, in some areas, the cow/calf pair is rated as 1.25 AUM's. Even in areas where the rating of 1 AUM for the cow/calf pair is used, there is a wide variance in rating other animal types in comparison to the cow/calf pair. For example, parties to different transactions in the same local area may rate the forage used by yearling cattle as anywhere from 0.5 to 1.00 AUM. Bulls may be rated anywhere from 0.17 to 0.25 AUM while yearling sheep may be rated anywhere from 0.10 to 0.25 AUM.

In transactions in which two or more types of animals were involved, the appraisers found that the prices for the different types of animals demonstrated a conversion rate that differed from the stated AUM definition. For example, a lessee or lessor may have said that the conversion rate for yearling cattle was 0.8 AUM, yet the price charged for the yearlings was 0.66 of the rate for cow/calf pairs. A ewe/lamb pair rated as 0.20 AUM may have been charged at 0.25 of the rate charged for a cow/calf pair.

The current trend towards crossing breeds that have historically been grazed on western rangelands with a wide variety of larger bodied "exotics" tends to further confuse the use and meaning of the term of AUM. The traditional definition of an AUM used 400 pounds of total

digestible nutrient (TDN) as the forage requirements for an animal unit, or the forage required for a 1,000-pound animal, as the base. In current usage, the requirements may vary significantly from the 400 pounds of TDN. The animal sizes for a mature animal can vary substantially from the 1,000-pound animal.

Based on the foregoing factors and on general discussions with livestock raisers throughout the appraisal area, the appraisers became convinced that the AUM as a pricing unit is both confusing and archaic. It more reflects the thinking of the academic and governmental communities than that of the majority of the typical western livestock raisers. The appraisers concluded that the valuation should be expressed in terms of price per animal per month for each different type of animal.

Analysis of the transaction data indicated that in the private sector:

The prices paid for mature cattle (meaning cow/calf pairs, dry cows, heifers beyond the age of 18 months, bulls, and horses) are substantially the same.

Bulls placed in with the cows as breeding bulls are treated as part of the pair unit (cow/calf) and no separate charges are made for these bulls.

Horses, when required for daily care and movement of livestock, also are treated as part of the pair unit (cow/calf) or yearling unit and no separate charges are made for these animals.

Comparison over the entire market data search area of the average prices paid for yearling cattle (meaning weaned animals up to the age of 18 months) with the average prices for mature cattle shows that yearlings are paid for at a rate generally less than that of mature cattle.

In reviewing the data from the individual pricing areas, the relationship of prices paid for yearling cattle versus mature cattle varied from pricing area to pricing area. Based on this, it would be improper to base the price for grazing yearling animals on any formula or mathametical relationship to mature livestock.

Prices paid for sheep show no substantial differentiation between the different classes of sheep. There is also no uniform relationship between the prices paid for sheep and the prices paid for mature cattle. Therefore, it would be improper to attempt to use a mathematical formula or factor to convert cattle prices to an indication of value for sheep.

The valuations will be based on the foregoing conclusions.

Carrying Capacity: Both agencies use the animal unit month as the unit of measure in estimating carrying capacities of the public rangelands. In the private sector, the majority of the parties involved in grazing transactions think in terms of so many acres per head or pair month, or so many head per section for a season, or head for the season for the property. When they do use the term animal unit, they typically are referring to whatever animal they are talking about rather than the 1,000-pound animal or any equivalent. They estimate the carrying capacity of a property and decide on its stocking rate on the basis of how many

animals of a specific type they think the property will support. Usually their decisions are based on experience from past years and by observing both range condition and the condition of the animals during and after the season of use. They recognize that carrying capacity is not constant, but varies from year to year depending on the weather and the amount of precipitation.

Because of the wide variety of terms used in expressing carrying capacities, the appraisers had to choose a common "yardstick" to use in comparing carrying capacities. Since these transactions would ultimately be compared to public rangelands grazing use, the appraisers adopted a scale of rating forage requirements for different types of animals in terms of acres/AUM. This expression appears to reflect what is being used and expressed by the majority of persons in the private sector.

VALUATION

General Description of Transaction Data Analyses

The questions on the Grazing Rental Data Field Information Sheet were designed to generate information that would allow the appraisers to test 99 physical characteristics and lease terms and conditions as elements that could possibly affect the value or price of grazing. (The background for selection of these elements is given in Exhibit 7 in the Addenda.) These 99 elements were later reduced to 81 potential value factors, with elements producing similar information being combined.

Each of the 81 factors was analyzed in light of the market data to determine its demonstrated effect on value, if any. These analyses involved a series of sorting procedures in which all of the leases in a given location were arrayed according to either the individual factor or to the unit price as the sort basis for that lease array. Once the data were isolated into homogeneous groups by animal kind and within a county location, further sorting was done to isolate those factors having the greatest affect on the lease rate.

The 47,324 leases verified by the field appraisers were then sorted into 10 groups, or subfiles, to facilitate their comparison with the subject grazing use and each other. The subfiles represent different categories of lease transactions, as follows:

Note: The number of leases and number of observations referred to in the following discussion will not agree, as many leases had 2 to 3 animal types present at differing prices. Each animal price then became a price observation. Further, some leases were for unspecified animals either by type or number and as such would contribute to the number of observations.

- Subfile A Those transactions that were verified as not being fair market value leases because the intent of the lessor is to receive a value other than the fair market price. A specific verbal inquiry as to the intent of the lessor to collect fair market value in leasing the property for grazing purposes was implemented during the midpoint of the market data search.

 A number of leases verified prior to the implementation of this question are contained in other subfiles. There were 2812 leases representing 6,060,644 acres, verified as being nonmarket transactions. A cursory review of this subfile indicates that many of these transactions are relatively small inholdings, or are large ranches which have been on the market and have not sold. No price analysis of this subfile was carried out as these leases were reported by a party to the transaction as being nonmarket and therefore not reliable indicators of value.
- Subfile B This file contains transactions that do not lend themselves to comparative analysis due to their pricing units (% of calf crop, % of weight gain, etc). It was impossible to evaluate the 1009 leases contained in this subfile due to the lack of usable common pricing units. The majority of these leases were in the form of some kind of share-crop agreement; and without some knowledge of the cash equivalency of the commodity tendered as rent, no usable indications of value could be derived.
- Subfile C -Those transactions in which the price is set "administratively," without reference to the physical nature of the involved property. This subfile represents the greatest number of leases, 37,789 and the largest amount of acreage, 58,892,715 acres in the total data base. These leases represent property that is typically under the jurisdiction of various governmental bodies and/or corporate ownerships, where in both cases a single fee is set without regard to the market in which it is to be applied and with no relationship to the location, size or relative quality of the range being leased. These leases are not viewed as good indicators of market value, as they do not possess the characteristics that would support the motive of receiving market value in return for the grazing use authorized by the lease as that of the lessor. In fact, most of these leases represent a public accommodation characteristic where the fees paid are to defray the costs of the paperwork involved in the administration of the lease(s). The price indicators of this subfile are shown in the grid which follows:

Explanation of Transaction Data Summary Tables: On the following pages are numerous tables providing the reader with totals and averages of acres, prices, and numbers of observations. Each price area data array has been calculated as a separate entity. For example, \$4.69, in the first table on the next page is the average of ALL of the data for the 7-year period westwide. This figure is not to be construed as an average of the individual pricing area average prices. None of the entries on the westwide line are totals or averages of the preceding columns. All of the multi-year/multi-area figures are identified with an asterisk. For an example of the method used in calculating averages with and without the 15% clip see multi-year/multi-area averages explanation in Glossary.

PRICE-AREA	ACRES WG	r avg pr	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1 2 3 4 5 6	1,758,974 280,319 2,257,923 3,717,142 95,480 376,357	\$ 4.77 \$ 4.77 \$ 3.88 \$ 2.86 \$12.02 \$ 3.13	\$ 4.75 \$ 4.95 \$ 4.14 \$ 2.96 \$15.93 \$ 5.79	\$ 4.52 \$ 4.50 \$ 3.47 \$ 2.59 \$17.50 \$ 3.24	4,266 147 2,564 1,555 335 50	\$13.00 \$ 9.06 \$53.00 \$23.38 \$17.50 \$13.00	\$ 0.35 \$ 3.00 \$ 0.67 \$ 0.17 \$ 2.39 \$ 1.07
Westwide*	8,486,195	\$ 3.70	\$ 4.69		8,917	\$53.00	\$ 0.17

MATURE CATTLE & HORSES SUBFILES: C ONLY - FEDERAL OWNERS - 100%

PRICE-AREA	ACRES WO	GT AVG PR	AVG PRICE	MEDIAN # OF OBS	HIGH	LOW
1 2 3 4 5 6	8,474,136 216,350 6,799,933 2,462,799 1,526,761 170	\$10.40 \$ 4.48 \$ 4.65 \$ 4.00 \$ 3.40 \$ 7.26	\$11.17 \$ 5.49 \$ 4.94 \$ 6.14 \$ 2.80 \$ 7.26	\$ 5.42 11,031 \$ 5.86 120 \$ 3.34 1,775 \$ 4.92 398 \$ 2.75 114 \$ 7.26 1	\$68.89 \$ 5.86 \$62.00 \$13.89 \$ 5.00 \$ 7.26	\$ 2.40 \$ 3.11 \$ 1.40 \$ 0.49 \$ 1.40 \$ 7.26
Westwide* 1	9,480,149	\$ 6.96	\$10.08	13,439	\$68.89	\$ 0.49

YEARLINGS, ETC SUBFILES: C ONLY - NONFEDERAL OWNER - 100%

PRICE-AREA	ACRES WG	T AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1 2 3 4 5	18,000 16,080 11,360 495,117 60,200	\$ 8.86 \$ 5.33 \$ 8.67 \$ 2.01 \$ 3.38	\$ 8.86 \$ 5.33 \$ 8.80 \$ 2.02 \$ 3.84	\$ 8.86 \$ 5.33 \$ 8.86 \$ 1.61 \$ 3.50	21 21 23 183 70	\$ 8.86 \$ 5.33 \$ 8.86 \$10.00 \$ 5.00	\$ 8.86 \$ 5.33 \$ 8.00 \$ 0.17 \$ 3.25
Westwide*	600,757	\$ 2.56	\$ 3.58		318	\$10.00	\$ 0.17

YEARLINGS, ETC SUBFILES: C ONLY - FEDERAL OWNERS - 100%

PRICE-AREA	ACRES W	GT AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1 3 4 5 6	120,451 929,381 534,682 197,384 170	\$ 4.19 \$ 2.79 \$ 8.21 \$ 3.12 \$ 5.08	\$ 6.41 \$ 3.17 \$ 8.00 \$ 3.37 \$ 5.08	\$ 9.20 \$ 3.34 \$ 8.75 \$ 3.00 \$ 5.08	114 304 153 9 1	\$ 9.20 \$ 5.80 \$12.00 \$ 6.30 \$ 5.08	\$ 2.45 \$ 0.20 \$ 0.57 \$ 3.00 \$ 5.08
Westwide*	1,782,068	\$ 4.54	\$ 5.08		581	\$12.00	\$ 0.20

^{* -} See Multi-Year Averages, Etc. description contained in the Glossary of Terms.

SHEEP SUBFILES: C ONLY - NONFEDERAL OWNER - 100%

PRICE-AREA	ACRES WG	r avg pr	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1	1,236,348	\$ 0.67	\$ 1.55	\$ 0.69	859	\$ 3.55	\$ 0.07
Westwide*	1,236,348	\$ 0.67	\$ 1.55		859	\$ 3.55	\$ 0.07

SHEEP SUBFILES: C ONLY - FEDERAL OWNERS - 100%

PRICE-AREA	ACRES WG	T AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1	1,446,638	\$ 0.83	\$ 0.98	\$ 0.88	368	\$ 2.05	\$ 0.66
Westwide*	1,446,638	\$ 0.83	\$ 0.98		368	\$ 2.05	\$ 0.66

Subfile D - Those leases for which the price was expressed as a lump sum per season/year or \$/acre per season/year that are being operated at a stocking rate greater than 125 percent of carrying capacity or less than 75 percent of carrying capacity. The percent carrying capacity is calculated based upon the reported carrying capacity and the reported stocking rate. This subfile contains 908 leases representing 3,403,283 acres. The majority of the leases in this subfile are a product of significant changes in livestock inventory after the commitment to lease the grazing area was made. The price indicators for these leases are shown in the grid below.

MATURE CATTLE & HORSES SUBFILES: D - NONFEDERAL OWNERS - 100%

PRICE-AREA	ACRES WG	r avg pr	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1 2 3 4 5	16, 318 71, 413 104, 456 170, 785 387, 180 294, 449	\$10.48 \$ 6.98 \$ 6.95 \$ 5.19 \$ 2.44 \$ 6.33	\$ 7.54 \$ 5.23 \$ 5.43 \$ 5.45 \$ 3.59 \$ 6.80	\$ 3.48 \$ 4.04 \$ 4.03 \$ 3.47 \$ 2.50 \$ 5.58	30 36 174 157 31 178	\$25.00 \$22.92 \$34.79 \$64.58 \$25.00 \$28.57	\$ 0.80 \$ 0.39 \$ 0.02 \$ 0.11 \$ 0.30 \$ 0.38
Westwide*	1,044,601	\$ 4.87	\$ 5.84		606	\$64.58	\$ 0.00

MATURE CATTLE & HORSES SUBFILES: D - FEDERAL OWNERS - 100%

PRICE-AREA	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1 2 3	1,900 11,541 84,610	\$11.37 \$ 7.37	\$ 9.45 \$11.37 \$ 6.35	\$ 9.45 \$11.37 \$ 5.90	1 1 14	\$ 9.45 \$11.37 \$19.55	\$ 9.45 \$11.37 \$ 0.40
4 5 6	1,499,406 30,793 8,244	\$12.24	\$ 8.84 \$ 8.62 \$ 3.94	\$ 6.72 \$ 3.43 \$ 2.84	40 7 13	\$56.23 \$33.40 \$13.00	\$ 0.63 \$ 1.79 \$ 0.64
Westwide*	1,636,494	\$ 5.70	\$ 7.56		76	\$56.23	\$ 0.00

^{* -} See Multi-Year Averages, Etc., description contained in the Glossary of Terms.

	YEARLINGS, ETC SUI	BFILES: D - N	ONFEDERAL OWNERS -	100%	
PRICE-AREA	ACRES WGT AVG PR	AVG PRICE	MEDIAN # OF OBS	HIGH	LOW
1 2 3 4 5 6	2,320 \$ 7.55 1,800 \$ 4.77 17,474 \$ 7.43 19,607 \$10.27 11,755 \$ 2.79 99,309 \$ 4.30	\$ 4.48 \$ 6.66 \$ 4.58 \$ 1.68	\$ 2.00 5 \$ 4.09 6 \$ 4.29 21 \$ 2.99 14 \$ 1.68 2 \$ 3.59 55	\$17.26 \$ 7.03 \$26.67 \$20.55 \$ 3.11 \$17.50	\$ 1.42 \$ 2.10 \$ 0.04 \$ 0.18 \$ 0.24 \$ 0.29
Westwide*	152,265 \$ 5.36	\$ 4.94	103	\$26.67	\$ 0.04
	YEARLINGS, ETC S	UBFILES: D -	FEDERAL OWNERS - 1	00%	
PRICE-AREA	ACRES WGT AVG PR	AVG PRICE	MEDIAN # OF OBS	HIGH	LOW
3 4 6	72,420 \$ 4.02 38,878 \$ 4.92 65,500 \$ 3.75	\$ 4.92 \$ 4.35	\$ 3.79 5 \$ 4.93 3 \$ 4.35 2	\$20.83 \$ 4.93 \$ 5.40	\$ 1.39 \$ 4.91 \$ 3.29
Westwide*	176,798 \$ 4.11	\$ 5.99	10	\$20.83	\$ 1.39
	SHEEP SUBFILE	S: D - NONFEI	DERAL OWNERS - 100%		
PRICE-AREA	ACRES WGT AVG PR	AVG PRICE	MEDIAN # OF OBS	HIGH	LOW
1	264,200 \$ 0.61	\$ 1.25	\$ 0.64 72	\$20.62	\$ 0.03
Westwide*	264,200 \$ 0.61	\$ 1.25	72	\$20.62	\$ 0.03
	SHEEP SUBFII	LES: D - FEDE	RAL OWNERS - 100%		
PRICE-AREA	ACRES WGT AVG PR	AVG PRICE	MEDIAN # OF OBS	HIGH	LOW

28,059 \$ 3.32 \$ 2.46

Westwide*

28,059 \$ 3.32 \$ 2.46 \$ 0.86 7 \$10.33 \$ 0.57

\$10.33 \$ 0.57

^{* -} See Multi-Year Averages, Etc. description contained in the Glossary of Terms.

Subfile E - All transactions which are "take-in" operations where the landlord either provides some or all of the day-to-day management of the livestock as part of the agreement. These transactions are not comparable to the subject of this appraisal report and as such are removed from further consideration in the valuation process. 1680 "take-in" operations on 10,946,928 acres were verified and are contained in this subfile. They do, however, reflect the significantly higher prices paid for the "take-in" type operation. The price indicators for these leases are shown in the grid below.

MATURE COWS	SUBFILES:	E	ONLY	_	NONFEDERAL	OWNER	_	100%
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PRICE-AREA	ACRES WG	T AVG PR	AVG PRICE	MEDIAN	OF OBS	HIGH	LOW
1	80,895	\$16.85	\$13.77	\$14.04	17	\$20.00	\$ 3.33
2 3	145,972 691,523	\$11.09 \$10.81	\$10.81 \$11.01	\$12.00 \$10.50	41 468	\$15.00 \$50.00	\$ 3.75 \$ 0.20
4 5	388,772 1,615,676	\$ 9.81 \$10.71	\$ 9.90 \$ 9.49	\$10.00 \$10.00	270 52	\$30.00 \$14.00	\$ 0.10 \$ 2.25
6	140,555	\$10.40	\$ 9.99	\$10.00	40	\$15.00	\$ 2.20
Westwide*	3,063,393	\$10.78	\$10.58		888	\$50.00	\$ 0.10

MATURE COWS SUBFILES: E ONLY - FEDERAL OWNERS - 100%

PRICE-AREA	ACRES WG	T AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1 2 3 4 5	29,640 29,742 924,755 669,715 907,455 224,277	\$13.06 \$10.81 \$ 9.66 \$10.20 \$ 7.34 \$ 9.61	\$11.46 \$11.25 \$10.36 \$ 9.48 \$ 8.50 \$ 9.02	\$12.00 \$11.25 \$10.00 \$ 9.00 \$ 9.00 \$ 10.00	11 2 109 41 34 8	\$16.06 \$12.00 \$35.00 \$18.75 \$12.50 \$16.00	\$10.00 \$10.50 \$ 0.13 \$ 5.00 \$ 1.90 \$ 3.98
Westwide*	2,785,584	\$ 9.07	\$ 9.89		205	\$35.00	\$ 0.13

YEARLINGS, ETC SUBFILES: E ONLY - NONFEDERAL OWNER - 100%

PRICE-AREA	ACRES WG	r avg pr	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1 2 3 4 5	101,502 494,999 381,141 292,141 965,563 458,546	\$ 8.18 \$ 9.23 \$ 7.77 \$ 7.39 \$ 6.88 \$ 6.77	\$ 8.14 \$ 8.54 \$ 8.12 \$ 8.04 \$ 8.30 \$ 6.68	\$ 8.00 \$ 8.62 \$ 8.00 \$ 8.00 \$ 7.00 \$ 6.66	29 78 190 164 45 60	\$10.00 \$14.40 \$17.11 \$30.00 \$20.00 \$12.00	\$ 4.43 \$ 2.50 \$ 0.10 \$ 0.27 \$ 1.58 \$ 0.08
Westwide*	2,693,892	\$ 7.52	\$ 8.02	·	566	\$30.00	\$ 0.08

^{* -} See Multi-Year Averages, Etc. description contained in the Glossary of Terms.

PRICE-AREA	ACRES WO	GT AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1 2 3 4 5 6	20,300 84,954 1,856,527 389,454 876,903 424,795	\$ 8.80 \$ 7.24 \$ 7.18 \$ 7.76 \$ 6.24 \$ 5.22	\$ 8.63 \$ 7.78 \$ 7.44 \$ 7.03 \$ 5.80 \$ 5.45	\$ 8.50 \$ 8.21 \$ 7.00 \$ 7.00 \$ 7.14 \$ 5.00	3 6 64 18 7 10	\$ 9.40 \$10.00 \$13.50 \$10.23 \$ 9.00 \$ 7.25	\$ 8.00 \$ 5.00 \$ 1.40 \$ 4.50 \$ 0.51 \$ 4.00
Westwide*	3,652,933	\$ 6.79	\$ 7.13		108	\$13.50	\$ 0.51

SHEEP SUBFILES: E ONLY - NONFEDERAL OWNER - 100%

PRICE-AREA	ACRES WG7	AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1	157,448	\$ 1.66	\$ 1.88	\$ 1.50	36	\$ 6.00	\$ 0.43
Westwide*	157,448	\$ 1.66	\$ 1.88		36	\$ 6.00	\$ 0.43

SHEEP SUBFILES: E ONLY - FEDERAL OWNERS - 100%

PRICE-AREA	ACRES WG	T AVG PR	AVG PRICE	MEDIAN # (OF OBS	HIGH	LOW
1	38,695	\$ 1.53	\$ 1.51	\$ 1.56	6	\$ 2.40	\$ 0.15
Westwide*	38,695	\$ 1.53	\$ 1.51		6	\$ 2.40	\$ 0.15

Subfile F - This file contains transactions that provide or contain exclusive access characteristics (i.e., deny public access). Permits/leases granted by the FS and the BLM do not allow the permittee/lessee to deny public access to the permitted area. 1,357 leases representing 6,227,109 acres are in this subfile. It has been reported that exclusive access or control of who may enter the grazing area has an impact on the price being paid for grazing use. This subfile was created to test whether in the market, to see if those properties that have exclusive access provided by the lessor do, in fact, command a price different from properties that do not have this characteristic. The price indicators for these leases are shown in the grid below.

MATURE CATTLE & HORSES SUBFILES: F - NONFEDERAL OWNERS - 100%

PRICE-AREA	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1 2 3 4 5	34, 352 154, 611 1,409, 842 945, 494 212, 508 321, 468	\$10.25 \$ 8.27 \$ 5.79 \$ 5.22	\$ 8.10 \$ 9.45 \$ 8.87 \$ 6.52 \$ 6.05 \$ 6.85	\$ 8.40 \$ 8.75 \$10.00 \$ 6.00 \$ 6.00 \$ 6.25	17 32 261 372 36 128	\$13.00 \$15.00 \$28.33 \$24.33 \$13.50 \$24.90	\$ 0.73 \$ 4.09 \$ 0.50 \$ 0.75 \$ 0.82 \$ 0.21
Westwide*	3,078,275	5 \$ 7.10	\$ 7.42		846	\$28.33	\$ 0.21

^{* -} See Multi-Year Averages, Etc. description contained in the Glossary of Terms.

M	ATURE CATTLE	« HURSES	SOBLITES:	F - FEDERAL	OWINERS	- 100%	
PRICE-AREA	ACRES WG	' AVG PR	AVG PRICE	MEDIAN #	OF OBS	HIGH	LOW
1 2 3 4 5	9,300 53,344 508,499 387,150 283,590 134,628	\$13.88 \$ 8.46 \$ 7.58 \$ 5.86 \$ 4.00 \$10.62	\$11.79 \$ 7.31 \$ 7.52 \$ 9.28 \$ 4.66 \$11.45	\$12.00 \$ 7.81 \$ 7.76 \$ 7.48 \$ 3.57 \$ 9.38	5 7 67 85 7 13	\$17.09 \$10.42 \$17.29 \$75.00 \$10.56 \$30.25	\$ 2.74 \$ 3.21 \$ 0.67 \$ 1.86 \$ 3.25 \$ 5.19
Westwide*	1,376,511	\$ 6.73	\$ 8.61		184	\$75.00	\$ 0.67
	YEARLINGS, E	TC SUB	FILES: F - N	ONFEDERAL O	NERS -	100%	
PRICE-AREA	ACRES WG	AVG PR	AVG PRICE	MEDIAN #	OF OBS	HIGH	LOW
1 2 3 4 5	5,050 97,830 479,206 77,619 127,466 135,530	\$ 7.14 \$ 8.29 \$ 6.21 \$ 5.20 \$ 3.85 \$ 5.52	\$ 7.07 \$ 9.30 \$ 6.65 \$ 6.42 \$ 5.45 \$ 5.05	\$ 7.20 \$ 8.00 \$ 6.69 \$ 6.00 \$ 5.00	3 20 65 58 7 55	\$ 8.00 \$48.00 \$16.00 \$27.50 \$10.17 \$15.12	\$ 6.00 \$ 3.25 \$ 1.33 \$ 1.25 \$ 0.04 \$ 1.40
Westwide*	922,701	\$ 5.92	\$ 6.38		208	\$48.00	\$ 0.04
	YEARLINGS,	ETC SU	BFILES: F -	FEDERAL OWN	ERS - 10	00%	
PRICE-AREA	ACRES WG7	AVG PR	AVG PRICE	MEDIAN #	OF OBS	HIGH	LOW
1 3 4 5 6 Westwide*	160 24,480 73,600 127,865 5,350 231,455	\$10.00 \$ 5.99 \$ 4.68 \$ 4.81 \$ 2.00 \$ 4.83	\$10.00 \$ 6.00 \$ 6.01 \$ 5.43 \$ 2.00 \$ 5.81	\$10.00 \$ 6.00 \$ 6.00 \$ 4.43 \$ 2.00	1 2 4 4 1	\$10.00 \$ 6.00 \$ 8.00 \$ 9.60 \$ 2.00	\$10.00 \$ 6.00 \$ 4.05 \$ 3.25 \$ 2.00
	SHEEP	SUBFILES	: F - NONFEI	DERAL OWNERS	- 100%		
PRICE-AREA				MEDIAN #		HIGH	LOW
1	356,659			\$ 1.02			\$ 0.02
Westwide*	356,659	\$ 1.53	\$ 1.88		98	\$13.48	\$ 0.02
	SHEEP	SUBFILE	ES: F - FEDE	RAL OWNERS -	- 100%		
PRICE-AREA	ACRES WG7	'AVG PR	AVG PRICE	MEDIAN #	OF OBS	HIGH	LOW
1	382,433	\$ 1.26	\$ 1.29	\$ 1.04	22	\$ 4.72	\$ 0.25
Westwide*	382,433	\$ 1.26	\$ 1.29		22	\$ 4.72	\$ 0.25
* - Soo M	hulti-Voar Av	orago	Eta docari	ation contai	nod in	the Clas	canz of

^{* -} See Multi-Year Averages, Etc. description contained in the Glossary of Terms.

Subfile G - This file contains transactions in which the forage includes crop aftermath, or more than 10 percent of the area is either irrigated or subirrigated. Due to the generally higher quality of forage available in crop aftermath situations and the greater productivity of irrigated and subirrigated pasture, it was felt that this type of range may command a higher price than the native nonirrigated grazing areas. The price indicators for these leases are shown in the grid below.

MATURE CA	PTLE &	HORSES	SUBFILES:	G ·	- NONFEDERAL	OWNERS -	- 100%
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PRICE-AREA	ACRES WG	T AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1 2 3 4 5	10,688 5,872 108,949 63,204 76,172 4,892	\$13.37 \$ 8.20 \$ 7.96 \$ 7.34 \$ 5.48 \$ 9.05	\$15.10 \$ 7.92 \$ 9.17 \$ 7.41 \$ 6.33 \$ 8.48	\$11.90 \$ 6.83 \$ 8.25 \$ 7.46 \$ 5.00 \$ 9.50	6 8 174 150 65	\$32.00 \$15.00 \$50.00 \$17.73 \$15.00 \$12.80	\$ 1.65 \$ 1.39 \$ 0.90 \$ 0.19 \$ 2.08 \$ 1.25
Westwide*	269,777	\$ 7.35	\$ 8.13		415	\$50.00	\$ 0.19

MATURE CATTLE & HORSES SUBFILES: G - FEDERAL OWNERS - 100%

PRICE-AREA	ACRES WG	T AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
3 4 5	158,514 78,098 60,702	\$ 5.24 \$ 9.54 \$ 6.34	\$ 6.55 \$ 7.08 \$ 6.18	\$ 5.90 \$ 5.94 \$ 6.98	34 15 3	\$19.16 \$20.17 \$ 8.00	\$ 0.03 \$ 2.93 \$ 3.55
Westwide*	297,314	\$ 6.59	\$ 6.68		52	\$20.17	\$ 0.03

YEARLINGS, ETC SUBFILES: G - NONFEDERAL OWNERS - 100%

PRICE-AREA	ACRES WG	T AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1 2 3 4 5	8,200 9,220 62,827 21,313 13,838 350	\$15.99 \$ 5.16 \$ 5.11 \$ 4.92 \$ 4.96 \$ 9.00	\$13.59 \$ 4.59 \$ 5.58 \$ 6.00 \$ 5.65 \$ 9.00	\$13.59 \$ 5.50 \$ 6.00 \$ 6.00 \$ 5.40 \$ 9.00	2 5 73 47 13 1	\$22.55 \$ 7.50 \$14.00 \$12.61 \$ 8.00 \$ 9.00	\$ 4.62 \$ 1.50 \$ 0.71 \$ 0.08 \$ 2.50 \$ 9.00
Westwide*	115,748	\$ 5.84	\$ 5.83		141	\$22.55	\$ 0.08

YEARLINGS, ETC SUBFILES: G - FEDERAL OWNERS - 100%

PRICE-AREA	ACRES WG	r avg pr	AVG PRICE	MEDIAN #	OF OBS	HIGH	LOW
3 4 5	17,452 2,150 1,840	\$ 4.68 \$ 5.00 \$ 3.55	\$ 4.69 \$ 5.00 \$ 3.55	\$ 5.00 \$ 5.00 \$ 3.55	7 1 1	\$ 6.50 \$ 5.00 \$ 3.55	\$ 2.41 \$ 5.00 \$ 3.55
Westwide*	21,442	\$ 4.61	\$ 4.60		9	\$ 6.50	\$ 2.41

^{* -} See Multi-Year Averages, Etc. description contained in the Glossary of Terms.

SHEEP SUBFILES: G - NONFEDERAL OWNERS - 100%

HIGH

MEDIAN # OF OBS

LOW

ACRES WGT AVG PR AVG PRICE

PRICE-AREA

1	45,605	\$ 1.60	\$ 1.55	\$ 1.50	77	\$ 5.95	\$ 0.04
Westwide*	45,605	\$ 1.60	\$ 1.55		77	\$ 5.95	\$ 0.04
	SHEEP	SUBFIL	ES: G - FEDE	ERAL OWNERS	- 100%		
PRICE-AREA	ACRES WG	T AVG PR	AVG PRICE	MEDIAN #	OF OBS	HIGH	LOW
1	28,754	\$ 2.79	\$ 1.77	\$ 1.70	4	\$ 3.60	\$ 0.07
Westwide*	28,754	\$ 2.79	\$ 1.77		4	\$ 3.60	\$ 0.07
Subfile H -	which water provided representition that they half the aspects the A which we of any further provided for the purious maller in of the purious desired for the purious desired	by the mg 869,80 are typisize of these lease ere verification arket in ever quite sholding the blic range of the contract of t	lessee. The lessee. The leases is are highlided as nonmalidence, the character is logical the lease geland under	insactions in the solution the subfile for the subfile for the size, with stockway similar to arket transacts leases and are retained as such and as such appraisal, the grid below the subfile subfile for the subfile subfil	lease a contact these averagi ater on those ctions. cannot ained in o in fa do rep	rea and ains 723 leases ing appropriate found in In the be disming the date of represent a	must be leases ndicates ximately In many subfile absence ssed as ta base. sent the segment
MATU	RE CATTLE &	HORSES	SUBFILES: H	- NONFEDERA	L OWNERS	5 - 100%	
PRICE-AREA	ACRES WG	T AVG PR	AVG PRICE	MEDIAN #	OF OBS	HIGH	LOW
1 2 3 4 5 6	15,580 67,569 41,980 19,363 21,664 51,993	\$ 8.73 \$ 5.74 \$ 4.22 \$ 6.41 \$ 5.18 \$ 4.39	\$ 6.47 \$ 6.20 \$ 4.56 \$ 6.66 \$ 4.61 \$ 5.28	\$ 5.47 \$ 6.00 \$ 3.20 \$ 7.00 \$ 5.00 \$ 4.50	25 146 109 40 17 81	\$13.00 \$20.84 \$35.63 \$12.00 \$16.00 \$25.81	\$ 0.85 \$ 0.13 \$ 0.33 \$ 1.40 \$ 1.25 \$ 1.29
Westwide*	218,149	\$ 5.34	\$ 5.59		418	\$35.63	\$ 0.13
TAM	URE CATTLE	& HORSES	SUBFILES:	H - FEDERAL	OWNERS	- 100%	
PRICE-AREA	ACRES WG	T AVG PR	AVG PRICE	MEDIAN #	OF OBS	HIGH	WOJI
1 3 4 5 6	7,360 87,268 45,736 280,144		\$ 6.83 \$ 5.15	\$ 5.53 \$ 5.50		\$18.00 \$11.11 \$13.00 \$ 7.05	\$ 5.00 \$ 0.02 \$ 2.89 \$ 2.89
Westwide*	537 421,045	\$ 5.00 \$ 6.34	\$ 5.00 \$ 6.02	\$ 5.00	3 42	\$ 5.00 \$18.00	\$ 5.00 \$ 0.02

^{* -} See Multi-Year Averages, Etc. description contained in the Glossary of Terms.

YEARLINGS, ETC SUBFILES: H - NONFEDERAL OWNERS - 100%

PRICE-AREA	ACRES WG	r avg pr	AVG PRICE	MEDIAN #	OF OBS	HIGH	LOW
1 2 3 4 6	7,840 11,861 4,868 1,720 25,403	\$ 6.84 \$ 3.82 \$ 5.23 \$ 7.30 \$ 7.40	\$ 3.49 \$ 4.14 \$ 2.35 \$ 5.50 \$ 2.87	\$ 3.00 \$ 3.36 \$ 1.76 \$ 8.00 \$ 2.55	7 41 11 3 70	\$ 9.00 \$12.03 \$ 7.00 \$ 8.00 \$16.00	\$ 1.60 \$ 0.67 \$ 1.17 \$ 0.51 \$ 0.44
Westwide*	51,692	\$ 6.28	\$ 3.32		132	\$16.00	\$ 0.44
	YEARLINGS,		BFILES: H -				
PRICE-AREA	ACRES WG7	AVG PR	AVG PRICE	MEDIAN #	OF OBS	HIGH	LOW
1 3 5	3,500 14,000 31,000	\$ 7.50 \$ 4.00 \$ 4.11	\$ 7.50 \$ 4.00 \$ 4.11	\$ 7.50 \$ 4.00 \$ 4.11	1 1 1	\$ 7.50 \$ 4.00 \$ 4.11	\$ 7.50 \$ 4.00 \$ 4.11
Westwide*	48,500	\$ 4.32	\$ 5.20		3	\$ 7.50	\$ 4.00
	SHEEP	SUBFILES	: H - NONFEI	DERAL OWNERS	- 100%		
PRICE-AREA	ACRES WGT	' AVG PR	AVG PRICE	MEDIAN #	OF OBS	HIGH	LOW
1	81,268	\$ 1.35	\$ 1.61	\$ 0.85	80	\$10.02	\$ 0.02
Westwide*	81,268	\$ 1.35	\$ 1.61		80	\$10.02	\$ 0.02
	SHEEP	SUBFIL	ES: H - FEDE	RAL OWNERS -	- 100%		
PRICE-AREA	ACRES WGT	AVG PR	AVG PRICE	MEDIAN #	OF OBS	HIGH	LOW
1	37,495	\$ 0.70	\$ 0.73	\$ 0.69	6	\$ 1.12	\$ 0.53
Westwide*	37,495	\$ 0.70	\$ 0.73		6	\$ 1.12	\$ 0.53

^{* -} See Multi-Year Averages, Etc. description contained in the Glossary of Terms.

Subfile I - This file contains transactions involving properties in which the ownership is identified as 100 percent corporate, railroad, or These transactions could, as a result of the motives and managment style of the landowners, result in a different pricing mode. This could produce some misleading value indicators to the appraisers. The data contained in this subfile were compared to data in other subfiles. This comparison showed that a large Nevada landowner's leases in northern Nevada were at a price structure significantly different than all of the other data available in that area. Discussions with their revealed that even though the prices were representative currently in effect, they had been established more than 10 years ago and had not been updated since. He indicated that he was in the process of adjusting all of them to a more current rate structure. Because the reported prices were a contract rent that quite old, little weight is being placed on these transactions in Nevada. In fact, they have been separated from the data base so as to provide a clearer picture of negotiated transactions in Nevada. This example of the application of the subfile analysis is offered as a demonstration of the use of this subfile. Contained in this subfile are 336 leases representing 1,494,027 acres. The price indicators for these leases are shown in the grid below.

MATURE CATTLE & HORSES SUBFILES: I - NONFEDERAL OWNERS - 100%

MATOR	CE CATTLE (x norses	20pt itte2:	I - NONFEI	JERAL OWNE	CRS - 100	6
PRICE-AREA	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1 2 3 4 5 6	1,64: 128,580 39,559 229,478 462,76 292,236	\$ 7.36 \$ 8.73 \$ 6.40 \$ 6.54	\$ 7.23 \$ 9.05 \$ 7.38 \$ 4.42 \$ 4.98 \$ 7.07	\$ 7.30 \$ 7.79 \$ 6.34 \$ 4.00 \$ 4.17 \$ 5.78	10 45 54 76 38 44	\$ 9.68 \$23.44 \$19.98 \$15.00 \$10.00 \$32.53	\$ 2.19 \$ 2.29 \$ 0.44 \$ 0.13 \$ 0.67 \$ 0.80
Westwide*	1,154,263	\$ 7.67	\$ 6.42		267	\$32.53	\$ 0.13
	YEARLINGS	, ETC SUB	FILES: I - N	VONFEDERAL	OWNERS -	100%	
PRICE-AREA	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
2 3 4 5 6	10,398 6,830 2,459 2,419 76,296	\$ 5.52 \$ 5.52 \$ 4.26	\$ 7.04 \$ 5.40 \$ 4.74 \$ 4.61 \$ 7.58	\$ 7.04 \$ 3.39 \$ 4.74 \$ 4.06 \$ 6.00	2 6 2 4 7	\$ 8.00 \$14.56 \$ 6.00 \$ 7.33 \$15.40	\$ 6.08 \$ 2.61 \$ 3.48 \$ 3.00 \$ 3.00
Westwide*	98,402	\$ 7.99	\$ 6.07		21	\$15.40	\$ 2.61
	SHEET	SUBFILES	: I - NONFE	DERAL OWNER	RS - 100%		
PRICE-AREA	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1	178,184	\$ 0.88	\$ 0.86	\$ 0.65	35	\$ 4.20	\$ 0.02
Westwide*	178,184	\$ 0.88	\$ 0.86		35	\$ 4.20	\$ 0.02

^{* -} See Multi-Year Averages, Etc. description contained in the Glossary of Terms.

Subfile J - This file contains transactions all involve properties with onsite stock water, and the vegetative cover is predominantly native, with less than 10 percent of the lease subirrigated or irrigated. They all have public access or access is controlled by the lessee. The properties are in private ownership or are various combinations of private, state, corporate, railroad, or federal lands. Transactions involving federal lands are considered open market leases because they are leased through competitive bidding or are subleases of BLM and FS grazing privileges. This subfile contains 3,383 leases representing 20,344,589 acres. The price indicators for these leases are shown in the grid below.

MATURE CATTLE & HORSES SUBFILES: J - NONFEDERAL OWNERS -	- 10	S	OWNERS	JEEDERAL.	- NC	T	SUBFILES:	HORSES	2	CATTLE	MATTIRE
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PRICE-AREA	ACRES WG	r avg pr	AVG PRICE	MEDIAN	# LSS	HIGH	LOW
1 2 3 4 5 6	492,889 945,356 1,369,037 705,360 1,750,213 485,522	\$11.83 \$ 8.48 \$ 7.88 \$ 6.72 \$ 4.92 \$ 8.43	\$10.73 \$ 7.63 \$ 7.73 \$ 6.96 \$ 6.34 \$ 7.49	\$10.54 \$ 6.69 \$ 7.80 \$ 6.25 \$ 5.29 \$ 6.89	299 329 562 393 113 179	\$42.28 \$40.50 \$27.99 \$65.00 \$48.75 \$24.00	\$ 0.67 \$ 1.10 \$ 0.25 \$ 0.20 \$ 0.57 \$ 0.26
Westwide*	5,748,377	\$ 7.32	\$ 7.93		1,875	\$65.00	\$ 0.20

MATURE CATTLE & HORSES SUBFILES: J - FEDERAL OWNERS - 100%

PRICE-AREA	ACRES WG	T AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1 2 3 4 5 6 Westwide*	146,260 362,737 2,489,270 1,733,066 4,100,648 12,065 8,844,046	\$ 8.76 \$ 7.16 \$ 6.73 \$ 4.99 \$ 4.80 \$ 8.25 \$ 5.54	\$ 8.37 \$ 6.56 \$ 7.23 \$ 6.74 \$ 5.14 \$ 5.96 \$ 6.73	\$ 8.33 \$ 6.00 \$ 6.60 \$ 6.12 \$ 4.77 \$ 5.50	35 26 235 133 104 10 543	\$17.00 \$11.00 \$25.08 \$37.89 \$11.67 \$10.35 \$37.89	\$ 0.86 \$ 3.71 \$ 0.02 \$ 0.28 \$ 0.51 \$ 3.38 \$ 0.02

YEARLINGS, ETC SUBFILES: J - NONFEDERAL OWNERS - 100%

PRICE-AREA	ACRES WG	T AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1 2	184,412 978,023	\$ 8.64 \$ 6.99	\$ 8.60 \$ 7.19 \$ 6.50	\$ 8.00 \$ 6.98 \$ 6.50	84 206 129	\$24.16 \$41.67 \$27.83	\$ 1.33 \$ 0.83 \$ 0.57
3 4 5 6	568,626 87,001 87,125 79,442	\$ 7.44 \$ 5.87 \$ 5.68 \$ 6.37	\$ 5.54 \$ 5.84 \$ 5.44	\$ 5.50 \$ 6.00 \$ 4.95	74 23 40	\$12.00 \$12.50 \$15.52	\$ 0.98 \$ 1.33 \$ 1.20
Westwide*	1,984,629	\$ 7.14	\$ 6.84	Ф 4.93	556	\$41.67	\$ 0.57

YEARLINGS, ETC SUBFILES: J - FEDERAL OWNERS - 100%

PRICE-AREA	ACRES WG	T AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1 2 3 4 5 6 Westwide*	16,200 93,031 767,787 169,078 532,792 5,800	\$ 4.70 \$15.90 \$ 5.80 \$ 5.21 \$ 3.54 \$ 4.42 \$ 5.55	\$ 6.62 \$ 9.59 \$ 5.81 \$ 5.65 \$ 4.08 \$ 4.91	\$ 6.50 \$ 6.40 \$ 5.83 \$ 5.13 \$ 4.26 \$ 5.00	5 8 50 19 12 3	\$15.00 \$32.06 \$10.00 \$10.31 \$ 7.00 \$ 6.00 \$32.06	\$ 0.09 \$ 2.93 \$ 1.92 \$ 0.97 \$ 1.33 \$ 3.73
	SHEEP	SUBFILES	: J - NONFEI	DERAL OWNER	S - 100%		
PRICE-AREA	ACRES WG	r avg pr	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1	710,659	\$ 1.09	\$ 1.10	\$ 0.97	159	\$ 6.13	\$ 0.04
Westwide*	710,659	\$ 1.09	\$ 1.10		159	\$ 6.13	\$ 0.04
	SHEEP	SUBFILI	ES: J - FEDE	RAL OWNERS	- 100%		
PRICE-AREA	ACRES WG	r avg pr	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1	2,280,326	\$ 0.90	\$ 1.18	\$ 1.02	70	\$ 3.30	\$ 0.06
Westwide*	2,280,326	\$ 0.90	\$ 1.18		70	\$ 3.30	\$ 0.06

Individual transactions within each of the subfiles were then sorted by animal type, and their factors arrayed according to the analysis file formats identified in the addenda (Exhibit 11). By using these file formats as the display vehicle, it was possible to segregate each factor and measure its demonstrated effect on pricing. Further, each subfile was analyzed as to the indicated price reflective of that situation. The animal group that contained mature cattle and horses was used as the criteria for this analysis as the two other groups lacked the westwide distribution of data the mature animal group had. As a result of this, it was felt that any conclusions drawn from the other groups could be distorted. The range in price for mature cattle and horses reflected by each subfile, with the exception of subfiles A, B, C, and E, fell well within the range of prices reflected by the most comparable transactions in subfile J. Based on this, subfiles D and F thru J were combined as the primary data base upon which the estimates of value are based. The price indicators for the combined subfiles D and F through J are shown below on a cumulative basis, and as a whole, reflect the effect of combining them one at a time. These files are the 100% unclipped files.

MATURE CATTLE & HORSES SUBFILES: J - NONFEDERAL OWNERS - 100%

PRICE-AREA	ACRES W	GT AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1 2 3 4 5	492,889 945,356 1,369,037 705,360 1,750,213 485,522	\$11.83 \$ 8.48 \$ 7.88 \$ 6.72 \$ 4.92 \$ 8.43	\$10.73 \$ 7.63 \$ 7.73 \$ 6.96 \$ 6.34 \$ 7.49	\$10.54 \$ 6.69 \$ 7.80 \$ 6.25 \$ 5.29 \$ 6.89	299 329 562 393 113 179	\$42.28 \$40.50 \$27.99 \$65.00 \$48.75 \$24.00	\$ 0.67 \$ 1.10 \$ 0.25 \$ 0.20 \$ 0.57 \$ 0.26
Westwide*	5,748,377	\$ 7.32	\$ 7.93	·	1,875	\$65.00	\$ 0.20

MATURE CATTLE & HORSES SUBFILES: I - J - NONFEDERAL OWNER - 100%

PRICE-AREA	ACRES WG	T AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1 2 3 4 5 6	494,532 1,073,936 1,408,596 934,838 2,212,980 777,758	\$11.81 \$ 8.34 \$ 7.90 \$ 6.63 \$ 5.25 \$ 9.19	\$10.62 \$ 7.80 \$ 7.70 \$ 6.55 \$ 6.00 \$ 7.41	\$10.00 \$ 7.11 \$ 7.50 \$ 6.00 \$ 5.00 \$ 6.80	309 374 616 469 151 223	\$42.28 \$40.50 \$27.99 \$65.00 \$48.75 \$32.53	\$ 0.67 \$ 1.10 \$ 0.25 \$ 0.13 \$ 0.57 \$ 0.26
Westwide*	6,902,640	\$ 7.37	\$ 7.74		2,142	\$65.00	\$ 0.10

MATURE CATTLE & HORSES SUBFILES: H - J - NONFEDERAL OWNER - 100%

PRICE-AREA 1 2 3 4 5 6	ACRES WGT	AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
	510,112	\$11.72	\$10.31	\$10.00	334	\$42.28	\$ 0.67
	1,141,505	\$ 8.18	\$ 7.35	\$ 6.72	520	\$40.50	\$ 0.13
	1,450,576	\$ 7.79	\$ 7.23	\$ 7.23	725	\$35.63	\$ 0.25
	954,201	\$ 6.63	\$ 6.56	\$ 6.00	509	\$65.00	\$ 0.13
	2,234,644	\$ 5.25	\$ 5.86	\$ 5.00	168	\$48.75	\$ 0.57
	829,751	\$ 8.89	\$ 6.84	\$ 6.04	304	\$32.53	\$ 0.26
Westwide*	7,120,789	\$ 7.30	\$ 7.39		2,560	\$65.00	\$ 0.13

MATURE CATTLE & HORSES SUBFILES: G - J - NONFEDERAL OWNER - 100%

PRICE-AREA	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1 2 3 4 5	520,800 1,147,377 1,559,525 1,017,405 2,310,816	\$ 8.18 \$ 7.80 \$ 6.67 \$ 5.26	\$10.39 \$ 7.36 \$ 7.61 \$ 6.75 \$ 5.99	\$10.00 \$ 6.72 \$ 7.50 \$ 6.11 \$ 5.00	340 528 899 659 233	\$42.28 \$40.50 \$50.00 \$65.00 \$48.75	\$ 0.67 \$ 0.13 \$ 0.25 \$ 0.13
6	834,643	\$ 8.89	\$ 6.90	\$ 6.13	316	\$32.53	\$ 0.26
Westwide*	7,390,566	\$ 7.31	\$ 7.49		2,975	\$65.00	\$ 0.13

MATURE CATTLE & HORSES SUBFILES: F - J - NONFEDERAL OWNER - 100%

PRICE-AREA	ACRES WG7	AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1	555,152	\$11.60	\$10.29	\$10.00	357	\$42.28	\$ 0.67
2	1,301,988	\$ 8.42	\$ 7.48	\$ 7.00	560	\$40.50	\$ 0.13
3	2,969,367	\$ 8.00	\$ 7.89	\$ 8.00	1,160	\$50.00	\$ 0.25
4	1,962,899	\$ 6.22	\$ 6.67	\$ 6.00	1,031	\$65.00	\$ 0.13
5	2,523,324	\$ 5.25	\$ 6.00	\$ 5.00	269	\$48.75	\$ 0.57
6	1,156,111	\$ 7.90	\$ 6.89	\$ 6.22	444	\$32.53	\$ 0.21
Westwide*	10,468,841	\$ 7.23	\$ 7.47		3,821	\$65.00	\$ 0.13

MATURE COWS & HORSES SUBFILES: D, F-J - NONFEDERAL OWNER - 100%

PRICE-AREA	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	# OF OBS	HIGH	LOW
1 2	571,470 1,373,401	•	\$10.07 \$ 7.34	\$10.00 \$ 6.89	387 596	\$42.28 \$40.50	\$ 0.67 \$ 0.13
3 4 5 6	3,073,823 2,133,684 2,910,504 1,450,560	\$ 6.13 \$ 4.88	\$ 7.57 \$ 6.51 \$ 5.75 \$ 6.86	\$ 7.50 \$ 6.00 \$ 5.00 \$ 6.00	1,334 1,188 300 622	\$50.00 \$65.00 \$48.75 \$32.53	\$ 0.02 \$ 0.11 \$ 0.30 \$ 0.21
Westwide*	11,513,442	\$ 7.01	\$ 7.25		4,427	\$65.00	\$ 0.11

Analysis of Transaction Data

The transaction data were examined by county. Transactions involving nonmarket situations, take—in operations, administratively determined prices, and prices which were obviously erroneous or mistated, were separated from what was thought to be the most comparable data. Even after this sorting, fairly wide ranges in prices paid still existed. These ranges could not be explained solely by dissimilarities in factors such as carrying capacity, terms and conditions of the leases, size, number of head grazed, etc. In other words, one could not explain why some prices differed substantially from the majority of prices paid for grazing use on other similar properties.

This situation is not surprising, nor is it unique to this particular appraisal. One finds these ranges of prices in making appraisals of almost every type of real estate or rights in real estate. The prices paid in individual transactions are the result of negotiations between two (or more) parties. Although both parties may be fully knowledgeable of the property in question, the resulting negotiated price may reflect the individual negotiating abilities of the parties involved. The price paid then becomes an indicator of market value for the type of property in question despite the fact that the price might differ substantially from the majority of the transactions taking place in a given area at a given time. In appraisals involving smaller properties, it is common to exclude the high and low prices paid and base the valuation on those properties priced in the middle of the exhibited range or on the majority of the available transactions.

Because the subject of the appraisal is an aggregation of a large number of allotments and tracts of varying size and physical nature, the comparable transactions involve properties of an equally varying size.

The amounts of money involved in the different transactions vary drastically. The appraisers felt that it would be erroneous to give equal consideration to a transaction that involved, for example, 640 acres for \$200 to another transaction involving 120,000 acres and \$60,000. For these reasons, a weighted average technique was tested, using all of the transactions.

There were two choices of measure to use as the weighting factor: number of animals or animal months and acreage. Because the AUM was not a commonly understood, nor widely used expression, acreage was selected as the weighting factor. The weighting process was as follows:

Transaction	Acreage	Price	Weight	Increment of Value
A	10,000	\$7.50	.1351	\$1.0135
В	12,000	\$6.65	.1622	\$1.0784
С	30,000	\$7.95	.4054	\$3.2230
D	22,000	\$6.85	.2973	\$2.0365
	74,000	_	1.0000	\$7.3514

 $10,000/74,000 = .1351 \times 7.50 = $1.0135, etc.$

It was determined that an inordinate amount of emphasis was being attributed to the larger leases when, in fact, the moderate to small private lease is what dominates the marketplace. Even more significant, the moderate to small allotments dominate the public rangeland jurisdictions. As the purpose of the weighting was to deemphasize the outliers or extremes in the price array, as well as account for any size-price relationship, the alternative of using varying levels of "percentage clips" on each data array was identified.

Initially, the data was arrayed in total (100%) and arithmetic means (averages) were calculated. The median of each array was identified along with the high and low prices. This process was followed for a series of "clips"; 80% (10% off top, 10% off the bottom), 70% (15% and 15%), 60% (20% and 20%). New arithmetic averages were then calculated and the high and low observations were identified for each "clip." The means, highs, and lows were then compared to the high, low, and mean of the 100% data array. The median of each array did not change, as a like number of leases were removed from both the top and bottom of each array.

The primary motive was to minimize the number of leases removed from the data base, and at the same time achieve the least amount of variability in each array of prices; in other words, reduce the span of the range of prices. The greatest efficiency in using the various clips was reflected in the 15% clip, leaving 70% of the data intact. The fewest number of leases were eliminated from consideration in the value conclusions at this level. In the 15% "clip", the mean or arithmetic average most closely approximated the median. The net effect of this procedure was to eliminate the extreme prices from the top and bottom of the array of data so as to allow the appraisers to reach conclusions based on the middle range of the prices shown by the transactions. It was felt that these prices in the midrange would best represent the most typical market situations. The value conclusions in the appraisal were based on the 70% base after clipping the 15% off the top and bottom of the price arrays.. The weighted average price indicators have been retained for the purposes of comparison with the indicators produced by the "clipped" array.

Development of Pricing Areas

In both the appraisal pretest and the early stages of this transaction data collection, it was apparent that the prices being paid for grazing use differed significantly from location to location within the transaction data search area. Consequently, the data were extensively analyzed to determine where these changes in price occurred and to identify the reasons or characteristics causing the changes. The transaction data and the county summary data were analyzed using a number of different factors. Among these were: (1) season(s) of use; (2) carrying capacity; (3) climate; (4) topography; (5) general vegetative types; (6) relative demand for grazing;

(7) presence or absence of public rangelands; and (8) the general economic health of the local livestock industry. Inasmuch as the majority of the grazing use on both public rangelands and in the transaction data, involved mature cattle, the analyses of different pricing areas were based on mature cattle transactions.

These analyses indicated that the observed differences in price could not be explained in terms of any one single factor or characteristic. Overlaps in seasons of use, carrying capacity, topography, demand or limited demand for grazing, or some of the other factors were found to exist between almost any areas selected for analysis.

Next, the prices of the individual transactions were posted on maps to see if definitive patterns would show up. The results of this process indicated that the broad changes in prices followed the distribution of general vegetative types. This appeared logical since vegetative types are a product of many of the other individual factors that could affect value.

The climate and rainfall, soils, and topography somewhat dictate the general type of vegetation that is found in any given area. These factors, in turn, dictate carrying capacity and season(s) of use.

The next step was to develop average prices (both weighted and arithmetic) for transactions involving mature cattle for each individual county within the transaction data search area. These average prices were posted on a large—scale map covering the entire data search area. This analysis showed patterns of prices that divided the 17 states into six somewhat irregular—shaped geographic areas. The boundaries of these areas roughly approximate the boundaries between major vegetation type areas. The primary criteria for the identification of a pricing area was obvious pricing changes. As many counties within the market area did not have a large population of lease data, it was necessary to use alternative criteria to supplant the price data as a basis of locating the pricing area boundaries. As a result of the principal appraisers' field investigations along with the county data gathered by the 21 active field appraisers, changes in native vegatation types, known changes in grazing use patterns, and major topographic characteristics all provided input to the identification of the pricing area boundaries.

Since boundaries between counties do not necessarily follow the same lines as boundaries between vegetation types, each county along the boundaries between the tentative pricing areas was analyzed in light of the information available to the appraisers regarding the physical nature of the county and grazing practices typical in that county. The pricing area boundaries were then located along the established county boundaries most closely approximating the obvious pricing change and associated change in vegetation type with consideration to the grazing patterns and practices prevalent in that area.

It has already been stated that a wide range of prices exists within any of the counties or pricing areas. Therefore, it must be recognized that some prices within one pricing area may be almost identical to the average price for another pricing area and vice versa. For example, one pricing area may contain a transaction at \$12.00, but has an average price of \$7.00 for the entire pricing area. Conversely, another pricing area may contain a transaction at \$3.00, which has an overall average price of \$7.50. The \$3.00 and \$12.00 individual prices represent highs and lows within their respective pricing areas.

Data regarding other animal types, take-in operations and administratively determined price-lease types were processed in the same manner to produce average prices for each category for each pricing area.

Potential Value Factors and Their Demonstrated Effects on Lease Rate

The following list identifies the 81 factors that were identified as potentially affecting the price or value of grazing use and describes their purpose and/or demonstrated effect. Transaction data refer to marketing actions related to private grazing land use, while subject permitted grazing use refers to grazing on the public rangelands. Each of the following analyses, as appropriate, were applied to the individual subfiles identified above to avoid the compounding effect any potential variable might have on price. Note: When no conclusion as to effect on price is indicated, the factor has a high degree of comparibility in both the subject and private lease data.

Element

Location:
by State, county,
township and
meridian.

Size:
by acreage and
animal number.

Transaction date: date current lease arrangements were agreed upon.

Purpose and/or Effect

This factor was used as a primary sort criteria in the analysis of the transaction data. State -county location of the leased area was the first sort element in establishing the pricing zones.

The lease transactions include a wide array of sizes in both acreage and number of animals. The subject permitted grazing use includes approximately the same size array as does the transaction data. Averages of the transaction unit prices were calculated for each county. These averages are used as representative value indicators for the individual counties.

A time trend analysis was developed to identify any pricing trend that may have occurred during the 7-year period represented by the transaction data. The analysis used the transaction date together with the date the current price became effective. A series of average prices for each pricing area, by animal kind and the year in which the price became effective, were developed.

No constant price trend was evident during the period of the market search (1977 through When one looks at the prices for individual years, prices fluctuate up and down. However, analysis of multi-year accumulative averages for the 70% file for mature cattle, shows that the prices have remained reasonably level for the 7-year period (See chart below). The prices shown in this chart indicate a very slight change from 1977 through 1983, a 0.58% per year increase. The time factor will be treated in the pricing area valuations. The use of the 70% transaction data base with greatest weight on the most recent 4-year period provides leveling effect on the various localized factors that might temporarily have an impact on prices being paid, such as weather, or temporary changes in livestock inventory levels or any other short-lived variable.

SUMMARY OF MULTI-YEAR AVERAGES

MATURE CATTLE 70% FEDERAL OWNERSHIP

PRICE AREA ALL

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77–83 7 YR	\$ 6.53	9,088,259	627
78-83 6 YR	\$ 6.61	8,759,532	576
79-83 5 YR	\$ 6.64	8,248,168	551
80-83 4 YR	\$ 6.77	7,206,586	466
81-83 3 YR	\$ 6.74	6,582,726	397
82-83 2 YR	\$ 6.73	5,644,474	310
83 1 YR	\$ 6.80	4,690,843	266

Transaction type:
Lease, sublease,
or mixed lease/
sublease.

This factor describes the kind of transaction verified. The type of transaction, together with the ownership status of the leased area, identifies when the lessor is not the property owner.

Document form:

The majority of the transactions verified were verbal.

Ownership:
Private, corporate,
state, other federal,
BLM, or FS.

See preceding comments under "Transaction Type."

Owner location:
Where property owner resides (absentee vs. local).

A sort using this factor was performed to determine if the property owner's location had any effect on the price being paid.

This test was performed within the established pricing areas and by animal kind within each county to minimize the effect any other factors may have had on the data array.

Owner intention:
Whether property
owner intends to
collect fair market
value or a fair
return.

All transactions where the lessor stated that his/her intent was not to collect fair market value or a fair return were separated into a subfile for independent analysis. These transactions are given minimal weight in the value conclusions.

Intangible benefits: Whether land owner is receiving some intangible benefits in addition to the grazing fee received.

This factor, or lease characteristic, was analyzed as it relates to lease price.

All transactions where the lessor was receiving some intangible benefit in addition to or in lieu of a fee were separated into a subfile for independent analysis. These transactions are given minimal weight in the value conclusions.

Lease history:
Number of years
lessee has leased
land from the same
lessor or predecessor.

The number of years that the lessee has leased the same area was analyzed to determine if tenure had a measurable effect on value.

See discussion regarding lease tenure on subsequent pages in this appraisal.

Term:
Number of years
specified by the
lease or
arrangement.

The term of the lease was viewed in relationship to the price to see if longer lease terms were priced differently than short-term (1 year) leases.

See discussion regarding lease tenure on subsequent pages in this appraisal.

Transferable:
Whether lessee may
transfer his/her rights
in the lease to a third
party without lessor's
consent.

Transferability does not occur in the nonfederal agreements.

Season(s) of use: Spring, summer, fall, etc. The season(s) of use on leased properties and public rangelands are substantially the same within each of the pricing areas.

Use period(s): Total number of days of use The use periods on private lands are similar highly to those on the public rangelands.

Distance from base: in miles from lessee's base The distance from the lessee's base is not a price criterion as the local market seems to set the price for leased grazing. The potential lessee is required to meet that price or not compete for the forage in the area. See following discussion of transportation of livestock to grazing area versus price on subsequent pages in the appraisal.

From or to lease area via public rangelands.

This criterion identifies the permittee as a BLM or FS permittee.

Complete ranch:
Does lease authorize
use of a complete
ranching unit?

This factor identifies the contribution value of buildings and other improvements to the rental value. In analyzing many complete ranch sales, the improvements and implements typically account for a very nominal portion of the total value (generally less than 10%) of the ranch unit. An analysis of total ranch leases indicates that they typically rent for less per overall pricing unit (AUM, HDMO, PRMO etc.) than do unimproved properties leased for grazing purposes.

Use of improvements:
Does lease authorize
use of building
improvements, such as
headquarters or line
camp?

See preceding comments for "Complete ranch."

Use of farm implements:
Does lease authorize
use of farm machinery?

See preceding comments for "Complete ranch."

Livestock types:
Allows for information
regarding three
different types or
classes of animals.

This factor was used as a primary sort criteria in segregating the different animal types for analysis purposes. Initially, 25 different potential animal types were evaluated for price variability within each county. This analysis indicates sufficient variation in prices of different unimal types so that three specified animal type groups and one unspecified, or mixed, animal group were identified. The price structure for the specified animal types is expressed in \$/head or pair/month, with the unspecified type expressed as \$/AUM.

Livestock number:
The number of each kind of animal.

The livestock numbers given in the transaction leases have numerous uses in the analysis. In many of the transactions, the price is given in terms of a lump sum payment for the term of the lease. The head count or stocking rate allowed the total price to be converted to a unit price suitable for comparison. This factor also allows stocking rate to be compared with the reported carrying capacity.

AUM definition:
The interviewee's
definition of an AUM
for three kinds of
animals or the field
appraiser's
definition of the
conversion rate used
in the area.

The reported AUM definition has a twofold purpose in the appraisal. First, it is a check on the price relationship of two or more animal types on the same lease. Second, and equally important, it can be used to determine if the AUM is an appropriate pricing unit in the market. Due to the diversity of the AUM definitions received, it was concluded that the AUM is inappropriate as a pricing unit, but can be used to check for price relationships between animal types.

Extra animal
penalty:
Penalty for running
more animals than
planned or agreed upon.

This factor is designed to reflect comparability or the lack of it to the permitted grazing use, which is the subject of this appraisal report. This characteristic is not typically found in the private lease market.

Fewer animal refund: Whether prepaid fees are refunded if the lessee runs fewer animals. See preceding comments for "Extra animal penalty."

nals. Ty removal refund: See p.



Early removal refund:
Whether fees are
reduced or refunded
if stock must be
removed early because
of drought, fire, etc.

See preceding comments for "Extra animal penalty."

Payment schedule:
Whether fees are paid
in advance of use,
periodically, or at
the end of the season,
or a combination of
these.

Using the 100% and 70% data bases, the prices from transactions which required 100% advance payment were compared to prices in which payments were made on payment schedules other than 100% in advance. This comparison showed a definite correlation between the payment schedule and price.

The table for the 100% data base (Mature Cattle and Horses - non-Federal), which follows, shows that the westwide prices over the 7-year period for payment schedules other than 100% in advance are 84% of the price for transactions with advance payments. The table for the 70% data base shows prices for payment schedules other than 100% in advance to be 80% of the prices for advance payments.

MATURE COWS SUBFILES: D, F-J - NONFEDERAL OWNER - 100%

PMT SCHEDULE: ADVANCE

PRICE-AREA	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1 2	391,217 540,021	\$11.54 \$ 7.94	\$ 9.55 \$ 6.76	\$10.00 \$ 6.08	301 354	\$42.28 \$37.33	\$ 0.67 \$ 0.13
3 4 5	993,439 995,626 895,894 532,982	\$ 5.46 \$ 3.82	\$ 6.44 \$ 5.73 \$ 4.93 \$ 6.41	\$ 6.07 \$ 5.25 \$ 4.50 \$ 5.20	662 530 107 379	\$35.63 \$65.00 \$25.00 \$32.53	\$ 0.02 \$ 0.11 \$ 0.30 \$ 0.21
Westwide*	4,349,179	\$ 6.62	\$ 6.66	Ψ 0,20	2,333	\$65.00	\$ 0.02

PMT SCHEDULE: OTHER

PRICE-AREA	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1	180,253		\$11.89	\$11.65	86	\$38.55	\$ 1.46
2 3	833,380 2,080,384	\$ 8.34	\$ 8.19 \$ 8.68	\$ 8.00	242 672	\$40.50	\$ 1.10
4 5	1,138,058 2,014,610	\$ 5.35	\$ 7.14 \$ 6.20	\$ 7.00 \$ 5.13	658 193	\$64.58 \$48.75	\$ 0.13
6	917,578	· · · · · · · · · · · · · · · · · · ·	\$ 7.56	\$ 7.00	243	\$25.81	\$ 0.43
Westwide*	7,164,263	\$ 7.27	\$ 7.91		2,094	\$64.58	\$ 0.05

MATURE COWS SUBFILES: D, F-J - NONFEDERAL OWNER - 70%

PMT SCHEDULE: ADVANCE

PRICE-AREA	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1	301,688	\$ 9.89	\$ 9.19	\$10.00	211	\$14.00	\$ 6.15
2	337,541	\$ 6.80	\$ 6.20	\$ 6.08	248	\$10.42	\$ 4.25
3	804,576	\$ 6.49	\$ 5.96	\$ 6.07	464	\$10.08	\$ 3.70
4	751,325	\$ 4.94	\$ 5.16	\$ 5.25	370	\$ 8.04	\$ 3.50
5	687,882	\$ 4.32	\$ 4.32	\$ 4.50	75	\$ 8.00	\$ 2.62
6	313,403	\$ 5.19	\$ 5.69	\$ 5.20	265	\$10.12	\$ 3.75
Westwide*	3,196,415	\$ 5.88	\$ 6.11		1,633	\$14.00	\$ 2.62

PMT SCHEDULE: OTHER

PRICE-AREA	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1	119,638	\$11.60	\$11.41	\$11.65	60	\$15.50	\$ 9.24
2	625,614	\$ 8.25	\$ 7.83	\$ 8.00	170	\$12.00	\$ 6.00
3	1,892,592	\$ 8.27	\$ 8.66	\$ 9.00	470	\$12.00	\$ 7.00
4	759,751	\$ 6.46	\$ 6.89	\$ 7.00	460	\$10.00	\$ 5.10
5	1,779,723	\$ 5.05	\$ 5.64	\$ 5.13	135	\$10.00	\$ 4.18
6	537,049	\$ 7.74	\$ 7.11	\$ 7.00	171	\$10.75	\$ 5.48
7.7	5 50 4 0 50		1 =			,	
Westwide*	5,714,367	\$ 7.04	\$ 7.66		1,466	\$15.50	\$ 4.18

The value conclusions for each of the price areas were based on an analysis of prices from the 70% data base which contained transactions with all of the different payment schedules. See table for the 70% data base (all payment schedules) which follows.

MATURE CATTLE AND HORSES SUBFILES: D, F-J - 70% TRANSACTIONS

NONFEDERAL OWNERSHIP

PRICE AREA	A ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1	438,965	\$10.17	\$ 9.76	\$10.00	271	\$15.00	\$ 7.08
2	976,559	\$ 7.66	\$ 6.86	\$ 6.89	418	\$11.00	\$ 5.00
3	2,666,391	\$ 7.61	\$ 7.35	\$ 7.50	934	\$11.43	\$ 5.00
4	1,513,595	\$ 5.82	\$ 6.12	\$ 6.00	832	\$10.00	\$ 4.76
5	2,427,010	\$ 4.90	\$ 5.20	\$ 5.00	210	\$ 9.00	\$ 3.76
6	839,633	\$ 5.97	\$ 6.28	\$ 6.00	436	\$10.45	\$ 4.50
Westwide*	8,862,153	\$ 6.53	\$ 6.87		3,101	\$15.00	\$ 3.76

Comparing the three prices produces:

Payment Schedule	Average Price	# Leases
Advance	\$6.11	1633
Merged	\$6.87	3101
Other	\$7.66	1466

This shows the price derived from the merged data base to include 46% of the difference of \$1.55 between average advance prices and prices for other payment schedules. From this it is concluded that the value estimates for each price area would be applicable in situations where the payment schedule would call for approximately 50% in advance and the balance paid during or at the end of the grazing use period.

Generally both agencies require payment in advance, but there are circumstances where various payment schedules are authorized. Inasmuch as the value conclusions contemplate a

50% advance payment and the balance by the end of the season, the value conclusions should be adjusted as follows: 10% cash discount for 100% advance payment; 10% surcharge for payments at the end of the season.

Historic prices: Pricing information back to 1977.

This information is analyzed to derive pricing trends for private grazing land leases for the period between 1977 and the present. This appraisal is based on data that represent prices that were implemented between 1977 and 1983. Several fluctuations in both price and number of transactions occurred during this period in different parts of the country. The appraisers attribute these fluctuations to normal weather cycles creating both drought conditions in some areas and wet periods in other areas, and

changes in livestock prices with attending increases or decreases in herd sizes.

Future prices: Pricing information through 1988. This information reflects future prices, as agreed to in current leases. Assuming that the conditions that were present at the time of the agreement stay constant, these future prices could be used to project potential future price trends.

Period of use:
Who has the authority
to determine when the
livestock will use the
property for grazing.

This factor indicates the level of the lessor's involvement in the grazing operation, or the degree of management discretion the lessor allows the lessee. This factor is designed to reflect comparability or the lack of it to the grazing use on public rangelands, which is the subject of this appraisal report.

Determine type:
Who decides on type
of animal to be grazed?

See preceding comments for "Period of use."

Determine number: Who decides how many livestock are to be grazed? See preceding comments for "Period of use."

Construction and replacement of range improvements: who decides whether range improvements are to be made. Who is responsible for construction? Who is responsible for replacing improvements that are beyond use?

The requirement to construct or replace range improvements is viewed as a significant factor in range managment. Most of the transaction who data indicate a shared responsibility between the lessor and lessee. Generally, the lessor and lessee agree as to what needs to be done, and the lessor provides the material and the lessee the labor. This factor is designed to reflect comparability or the lack of it to the permitted grazing use.

Repair:

Who is responsible for maintenance of fences, water facilities, and other structural improvements?

Maintenance typically is the responsibility of the lessee, as indicated by the majority of the lease transactions. In some cases, and depending upon the degree of maintenance required, the lessor provides the materials. This factor is designed to reflect comparability or the lack of it to the permitted grazing use.

Revegetation:
Who decides whether a
revegetation program is
to be used? If so, who
is responsible for the
data?

This factor indicates the level of the lessor's involvement in the grazing operation, or the degree of management discretion the lessor allows the lessee. There were few indications of this type of activity in the transaction data. This factor is designed to measure comparability, or the lack of it, with the permitted grazing use.

Ownership:
Who retains ownership
of any improvements
constructed during the
term of the agreement?

Ownership of structural range improvements of a permanent nature typically remains with the land-owner.

Legal liability:
Who is legally liable
for the livestock while
they are on the leased
property?

The liability for livestock while on the leased property was generally not considered by either party to the lease agreement. As such, it has no apparent effect on price.

Day-to-day operation:
Who is responsible for
daily animal care?

This factor distinguishes the "take-in" operations from the lessee-operated transactions. When the prices paid for the two types were compared, the price for "take-in" operations was significantly higher. This difference is due entirely to the greater level of landlord services provided to the tenant or lessee. These transactions vary widely in the amount of landlord services provided and are not

comparable to the public rangeland permit as an indicator of value.

Grazing system:
Who decides what kind
of grazing system is
to be used?

This factor indicates the level of the lessor's involvement in the grazing operation, or the degree of management discretion the lessor allows the lessee. This factor is used to gauge the comparability of the lease to the subject permitted grazing use.

Who determines moves: Who decides when the livestock are to be moved to and from the leased property? See preceding comments for "Grazing system."

Who moves:
Who is responsible f

Who is responsible for moving the livestock to and from the leased property?

When the lessee is responsible for the day-to-day care and feeding of the livestock, he/she moves the livestock, same as on public rangelands. In some "take-in operations" the landlords aided in the move.

Who determines moves:
Who decides whether the
livestock are to be
moved from one portion
of the lease to another?

This factor indicates the level of the lessor's involvement in the grazing operation, or the degree of management discretion the lessor allows the lessee. This element is used to gauge the comparability of the lease to the subject permitted grazing use.

Who moves:
Who is responsible for

any movement within the lease area?

See preceding comments for "Who moves."

Frequency of moves:
The number of times
livestock must be
moved within the lease
area.

This factor describes the stock rotation practices required by the lease agreement. Very few transactions include any reference to this being a factor in arriving at the price.

Distance of moves:
Total distance in miles
for the required moves.

See preceding comments for "Frequency of moves."

Manhours required:
Total manhours needed
to make required moves.

See preceding comments for "Frequency of moves."

Doctoring:

Who is responsible for this action?

When the lessee is responsible for the daily care and feeding, he/she handles the doctoring. On "take-in operations" this can be a shared responsibility.

Roundup:

Who is responsible for this action?

See preceding comments for "Doctoring."

Salt:

Who is responsible for this action?

See preceding comments for "Doctoring."

Water (General):
Who is responsible for seeing that there is a source of stock water available?

Most of the leased tracts without stock water on site were quite small or were in-holdings within the lessee's ranch. As such, it was impossible to differentiate between the leverage available to the lessee in these inholding situations and the lack of stock water on site.

Water hauling:

If it is necessary
to haul water, who is
responsible?

When the lessee is responsible for the daily care and feeding of the livestock, he/she is generally responsible for hauling any water that is needed.

Water pumping:

If water must be

pumped, who is

responsible for pumping

and paying any power

or fuel bills?

See preceding comments under ("Water hauling").

Stock Water Source: Wells, springs, tanks, offsite, etc. Usually these are in-place and the lessee is responsible for any maintenance required.

On "take-in operations," the landlord is responsible.

Water Distribution: Leased area is within 1 mile, 1.5 miles of water, etc. The water distribution on public rangelands is within the same range of variations as the nonfederal leased lands.

Water dependability: Year-round, seasonlong, etc. See preceding comments under "Water Distribution."

Supplemental feed:
If supplement feed is needed and allowed,
who is responsible for the costs and work?

This factor relates to the level of landlord services or responsibilities provided in the "take-in" operations.

Losses: Who stands the loss

of any livestock?

There are cases in the market where the landlord shares in the losses with the lessee, and other cases where the lessor guarantees a limit on the level of loss. For the most part, this factor relates to the level of landlord services or responsibilities provided in the "take-in" operations.

Other livestock:
Who has the
authority to
allow other
livestock to use
the leased land?

This factor reflects the amount of latitude afforded the lessee in the management of the property under the grazing lease. In the case of some total ground leases, this privilege is extended to the lessee. In the vast majority of cases, this prerogative is reserved to the lessor. This factor is designed to reflect comparability or the lack of it to the permitted grazing use, subject of this appraisal report.

Hunting:
Who has the authority
to allow hunting on
the land and to
collect any fees

See preceding comments for "Other livestock."

Recreation:
Who decides whether
the land may be used
by third parties for

for this use?

recreation?

See preceding comments for "Other livestock."

Resource harvesting:
Who may authorize
harvesting of timber,
hay, or other vegetal
resources?

See preceding comments for "Other livestock."

Unrelated commercial: Who may authorize use of property for signs, equipment storage, etc. and collect the fees? See preceding comments for "Other livestock."

Mineral development:
Who may authorize use
of the property for
mineral development,
dictate conditions, and
collect proceeds?

See preceding comments for "Other livestock."

Easements and rights-of-way:
Who has authority to grant these on either a temporary or perpetual basis and collect for the grants?

See preceding comments for "Other livestock."

Renewal terms:
Who sets the terms
for renewal of the
agreement?

The renewal terms for the majority of leases were verified as being set jointly by the lessor and the lessee. The method of renewal is generally a product of the location of the lessor and his involvement in the land under lease. Many of the leases are renewed by mail at the end of the calendar year. These renewals were named "Christmas card" leases by the field appraisers because, in all cases, the leases were verbal and were renewed via a short note and check in a Christmas card to the lessor from the lessee. With the majority of leases being verbal rather than written, this kind of renewal is common.

Rental adjustments: Who decides when rental adjustments are to be made? Provisions in the lease for rental adjustment is the exception rather than the norm.

Rental adjustments:
Who decides whether
adjustments in rental
are to be made when
drought, fire, or other
unplanned events call
for early removal?

See preceding comments under "Rental adjustments."

Real estate taxes:
Who bears the cost of real estate taxes?

The lessor pays the real estate taxes in the majority of cases.

Livestock taxes:
Who bears the cost of
livestock taxes?

The lessee typically pays any livestock taxes that are assessed.

Noxious weed control: Who decides whether a noxious weed problem should be controlled? The majority of the lessors and lessees reported that they had not considered this factor as part of the lease agreement.

Predator control: Who decides whether a predator problem should be controlled and by what means? See preceding comment for "Noxious weed control."

Pest control:
Who may take action
on a pest problem?

See preceding comment for "Noxious weed control."

Parasite control: Who is responsible for controlling parasites? See preceding comment for "Noxious weed control."

Access type: Trail or road. This factor identifies the type of access to the lease area.

Access control:
Who has authority to control who enters
the property and moves
among the livestock?

The transaction data did not show any conclusive relationship between who controls the access and the prices being paid.

Access quality:
Trails, unimproved,
improved, etc.

This factor further describes the type of access available to the leased area. Same as for Access Control above.

Topography:
Level, rolling,
hilly, etc.

This factor provides a broad, physical description of the leased area.

The majority of transactions include a variety of topographic characteristics and, as such, are similar to the public rangeland grazing areas.

Vegetation type:
by percent of native
range, improved range,
etc.

This factor describes the general vegetation cover within the lease area as a percent of the whole. Those leases where the crop aftermath comprises the forage, or where more than 10

percent of the area under lease is subirrigated or irrigated, were separated into a subfile for independent analysis.

Carrying capacity:
Estimates
by lessee, lessor,
or the field appraiser
in the terms used in
the particular area.

Estimated carrying capacity in the transaction data was analyzed from two perspectives. First, the data were analyzed to determine if the quality of the range—as expressed by the carry capacity—has a direct effect on price. No such relationship is apparent within the individual price areas. Second, the data were analyzed to determine the comparability of the transaction data to the areas under public permit. The same general array of carrying capacities are represented in both public and private grazing areas.

Relationship of
lessee to lessor:
The nature of the
relationship between
parties and whether
they believe the
price represents
fair market value.

This factor identifies those family transactions that might not represent fair market value.

All of the transactions identified as not being fair market transactions were separated into a subfile for independent analysis. These transactions are given minimal weight in the value conclusions.

Percent of
lessee's operation
on leased lands:
An estimate of the
percent of the
lessee's total forage
that is supplied by
leased lands.

This factor is designed to indicate whether those operators whose operations depend on a high percentage of leased range pay more or less than those who graze their livestock on predominantly self-owned land. No relationship between the percent of lease land in the operation and the prices paid is indicated by the transaction data. The prices for leased land are set by supply and demand, and the status of an individual in the market has no effect on the overall price structure.

Priority Flag

This factor is not a lease characteristic. It is designed to alert the appraisers in the analysis phase that there is some information in the transaction that makes its validity as an indicator of market value questionable.

Lease Tenure

Lease tenure was tested for its' effect on price. As a part of the lease verification, information on lease history was requested from those interviewed. The conclusions drawn from an evaluation of the private leasing market is that the vast majority of it leases for periods of less than 5 years (95.21%) with more than 99 percent for a period of 10 years or less. The majority of the leases are then renewed for a new term at the end of the lease period. The price and terms are then renegotiated and put into effect at the beginning of the new lease period. In no case was any evidence of renewal preference right, other than a few written options, found in the private market. Further, failure to pay the full agreed upon rent for any reason immediatly terminated any lease agreement, placing the property on the grazing rental market to any taker. Following are the distributions of lease term and renewal data derived from the market information. The tenure of the private leases was generally inferior to the public permit. No relationship to price was found based on tenure.

DISTRIBUTION BY LEASE TERM

ALL LIVESTOCK SUBFILES: D, F-J - ALL OWNERSHIP

TERM IN YEARS	TOTAL ACRES	AVG. SIZE IN ACRES	MEDIAN SIZE	NO OF LEASES	% OF TOTAL
1	14,654,397	2,986	640	4,907	68.84
2	3,674,828	18,014	2,700	204	2.86
3	3,237,633	6,361	1,560	509	7.14
4	609,917	7,720	2,335	79	1.11
5	7,020,613	6,459	1,000	1,087	15.25
6-10	1,236,507	4,354	640	284	3.98
11-15	304,690	11,285	1,377	27	. 38
16-20	559,301	46,608	5,641	12	.38 .17
21-99	53,540	2,818	1,120	19	. 27
TOTALS	31,351,426	4,398		7,128	100.00%

TENURE/LEASE HISTORY GRID

LEASE TERM - 1 YEAR SUBFILES: D, F-J - ALL OWNERSHIP

HIST-YEARS	ACRES	LEASES
NO INFO	7,254,929	2,616
1	2,031,885	511
2	696, 300	240
3	1,391,887	247
4	643,137	133
5	475,608	227
6-10	1,323,849	457
11-15	402,638	201
16-20	264,581	121
21-99	169,583	154
7-YR TOT	14,654,397	4,907

LEASE TERM - 2 YEAR SUBFILES: D, F-J - ALL OWNERSHIP

HIST-YEARS	ACRES	LEASES
NO INFO	1,946,363	98
1	87,816	9
2	1,330,876	29
3	71,302	5
5	6,320	3
6-10	119,078	28
11-15	53,186	16
16-20	41,809	7
21-99	18,078	9
7-YR TOT	3,674,828	204

LEASE TERM - 3 YEAR SUBFILES: D, F-J - ALL OWNERSHIP

HIST-YEARS	ACRES	LEASES
NO INFO	1,769,545	206
1	262,215	52
2	127,436	24
3	429,152	62
4	4,060	3
5	59,126	13
6-10	312,500	56
11-15	122,735	32
16-20	82,154	24
21-99	68,710	37
7-YR TOT	3,237,633	509

LEASE TERM - 4 YEAR SUBFILES: D, F-J - ALL OWNERSHIP

HIST-YEARS	ACRES	LEASES
NO INFO	374,957	49
1	67,762	4
3	35,140	4
4	70,291	10
5	7,876	4
6-10	8,025	3
11-15	7,126	2
16-20	40	1
21-99	38,700	2
7-YR TOT	609,917	79

HIST-YEARS	ACRES	LEASES
NO INFO	3,873,371	588
1	187,906	19
2	245,299	34
3	622,285	63
4	58,377	18
5	805,390	101
6-10	740,980	119
11-15	337, 345	107
16–20	102,655	20
21-99	47,005	18
7-YR TOT	7,020,613	1,087

LEASE TERM - 6-10 YEARS SUBFILES: D, F-J - ALL OWNERSHIP

HIST-YEARS	ACRES	LEASES
NO INFO	853,292	126
1	115,584	7
2	41,825	9
3	24,066	8
4	7,460	7
5	11,525	10
6-10	86,748	67
11-15	60,537	26
16-20	13,831	13
21-99	21,639	11
7-YR TOT	1,236,507	284

LEASE TERM - 11-15 YEARS SUBFILES: D, F-J - ALL OWNERSHIP

HIST-YEARS	ACRES	LEASES
NO INFO	276,951	24
5	2,000	1
11-15	25,739	2
7-YR TOT	304,690	27

LEASE TERM - 15-20 YEARS SUBFILES: D, F-J - ALL OWNERSHIP

HIST-YEARS	ACRES	LEASES
NO INFO	118,787	5
6-10	6,600	2
11-15	8,612	2
16-20	425,302	3
7-YR TOT	559,301	12

LEASE TERM - 21-99 YEARS SUBFILES: D, F-J - ALL OWNERSHIP

HIST-YEARS	ACRES	LEASES
NO INFO	48,598	15
3	3,000	1
6-10	1,162	1
21-99	780	2
7-YR TOT	53,540	19

An analysis of the distance to the leased grazing area from the base operation, and any apparent impact on price, was done based upon claims that ability to pay might be impaired due to excessive transportation costs. There is no identifiable pattern to indicate that the distance the livestock are moved to the grazing lease has any relationship to prices paid for leased grazing land. The following price/distance grids demonstrate that no consideration is given to this factor in the establishment of market prices for leased grazing land. In the first grid, it is shown that the second lowest prices are paid by those who move their livestock the shortest distances, with the lowest price being indicated by the 251-500 mile distance. The remaining indicators are randomly grouped, without pattern. A similar pattern is shown in the second and third grids. Based on the lack of apparent relationship between the distance the livestock are moved and the prices paid, the only conclusion that can be reached is that this is not a factor in the establishment of grazing lease prices, and further, that the prices are set locally and maintained by whatever level of competition is prevalent in the local market.

PRICE DISTANCE GRIDS

MATURE COWS SUBFILES: D, F-J - ALL OWNERSHIP - 100%

DIST/MILE	S ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
0- 5	12,949,398	\$ 5.95	\$ 7.06	\$ 6.25	3,264	\$75.00	\$ 0.02
6- 25	3,900,421	\$ 6.71	\$ 7.41	\$ 7.00	1,247	\$65.00	\$ 0.18
26- 50	3,672,826	\$ 6.90	\$ 7.74	\$ 7.14	468	\$34.79	\$ 0.15
51-250	2,969,087	\$ 6.59	\$ 7.63	\$ 7.37	326	\$24.90	\$ 0.20
251-500	373,960	\$ 5.83	\$ 6.55	\$ 6.60	15	\$12.35	\$ 2.89
501-999	223,160	\$ 5.81	\$ 7.40	\$ 7.29	4	\$10.00	\$ 5.00
7-YR TOT	24,088,852	\$ 6.29	\$ 7.23		5,324	\$75.00	\$ 0.02

YEARLINGS, ETC SUBFILES: D, F-J - ALL OWNERSHIP - 100%

DIST/MILES	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
0- 5	2,036,931	\$ 5.92	\$ 5.66	\$ 5.19	701	\$41.67	\$ 0.04
6- 25	1,113,605	\$ 6.11	\$ 6.50	\$ 6.12	323	\$48.00	\$ 0.19
26- 50	784,979	\$ 5.75	\$ 6.22	\$ 6.00	154	\$31.51	\$ 0.18
51-250	1,263,443	\$ 6.94	\$ 6.78	\$ 6.50	105	\$22.55	\$ 0.04
251-500	119,355	\$ 4.35	\$ 5.92	\$ 5.77	5	\$ 8.33	\$ 3.21
501-999	70,007	\$ 6.52	\$ 5.50	\$ 6.51	4	\$ 8.00	\$ 0.97
7-YR TOT	5,388,320	\$ 6.14	\$ 6.03		1,292	\$48.00	\$ 0.04

SHEEP SUBFILES: D, F-J - ALL OWNERSHIP - 100%

DIST/MILES	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
0- 5	2,080,987	\$ 0.65	\$ 1.39	\$ 0.95	278	\$20.62	\$ 0.03
6- 25	844, 249	\$ 1.79	\$ 1.32	\$ 1.00	150	\$10.33	\$ 0.02
26- 50	578,524	\$ 1.17	\$ 1.23	\$ 0.90	82	\$ 6.13	\$ 0.02
51-250	844,632	\$ 1.13	\$ 1.52	\$ 1.00	116	\$13.48	\$ 0.02
251-500	45,250	\$ 1.02	\$ 1.08	\$ 1.04	4	\$ 1.65	\$ 0.59
7-YR TOT	4,393,642	\$ 1.03	\$ 1.38		630	\$20.62	\$ 0.02

Overall Description of Private Grazing Agreements

The private grazing leases typically are verbal 1-year agreements ("handshake agreements") with no written documentation as to the specifics of that agreement. These leases more often than not are renewed year after year between the landowner and the lessee unless there is cause for nonrenewal; typical renewal of the private lease being little more than a Christmas card note and check for the following year's lease period. The majority of the private agreements specify the kind of animal and number of animals to be grazed. The season of use during the lease year is dictated by the local weather conditions. The agreements do not provide for nonuse at a reduced fee, nor are there typically any provisions for refunds due to reduced use during the grazing season.

The primary condition of these private agreements is that the property not be abused and be returned to the landowner at the end of the term of use in at least the same condition that it was received. The lessee's failure to maintain the condition of the range generally results in the termination of the lease (or no renewal) with no route of appeal. Routine structural range improvements (drift fencing, etc.) on the leased area are generally done by the lessee in some cases using material provided by the landowner. In the case of major range improvements (major water devopment, etc.) the landowner bears a substantial part of the cost of the improvement either directly or through reductions in rent until the construction is complete. Revegetation is typically handled by the landowner or credited to the lessee if done at his/her expense. In all cases the range improvements of a permanent nature are placed on the property with the prior agreement and consent of the landowner and belong to him/her upon completion.

There are a number of characteristics of the public permit which differ in varying degrees from the generally more informal private grazing agreements. The public rangeland permits are more rigid in content regarding specific use period, specified number and kind of animals authorized to graze, and inclusion of very specific stipulations regarding wildlife, public access and other uses of the agency lands. Two characteristics that are unique to the public rangelands are the appeal process as to decisions made by the landowner pertaining to the leased area and the privilege of taking nonuse, wherein the lessee can retain his/her priviledges through approval of nonuse, and not pay the grazing fees for that year. Nonuse is granted up to three consecutive years and with justification may exceed three years. A further departure, but not as significant, relates to the length of the agreement. The private agreements are generally one year, with a few at the 5-year term, and a scattering of leases at other lengths of time. The public permit is generally for a 10-year term. Of the total number of market-negotiated leases, excluding "take in" leases, 95.2 percent are for a 5-year or less term, with 69 percent of the total being one year or less in term. It must be noted that the vast majority of the one year leases are renewed and repeat from year to year.

The majority of permitted public rangelands have stock-water on site, are utilized within the same time frames or seasons as similar private lands in the same area and are accessible to the user via public roads or through the permittee's own property. The range of size is quite broad but similar to that found in the private market. In conclusion, the public rangelands are quite similar to those private lands found in the same general location.

The prices paid for use on nonfederal lands was compared to the prices paid for transactions involving lands in federal ownership. (Federal ownership includes those transactions where BLM and/or FS grazing privileges are being subleased as well as those transactions involving lands administered by other federal agencies such as Fish & Wildlife, Bureau of Reclamation, etc.) This comparison showed that federal ownership appears to lease for an amount slightly less than that of the nonfederal properties. The indicated range is from -1%, when comparing the \$7.15 average of 100% of the usable mature cow and horse data for all leases that are all or part federal ownership, to the \$7.25 average for the nonfederal ownership.

A -5% is indicated when the \$6.53 average for federal ownership, after the imposition of the 15% clip on the top and bottom of the data array (70% data base), is compared to the \$6.87 average for the nonfederal ownerships.

NONFEDERAL OWNERSHIP - 100%

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977	1,274,214	\$ 6.51	\$ 5.70	\$ 4.78	712	\$65.00	\$ 0.05
1978	418,953	\$ 8.97	\$ 7.10	\$ 6.67	226	\$25.81	\$ 0.25
1979	1,550,975	\$ 6.64	\$ 7.14	\$ 7.21	458	\$25.40	\$ 0.02
1980	1,472,924	\$ 6.06	\$ 7.14	\$ 6.67	496	\$50.00	\$ 0.30
1981	1,351,952	\$ 7.24	\$ 8.06	\$ 7.17	634	\$48.75	\$ 0.04
1982	781,481	\$ 6.59	\$ 6.99	\$ 6.37	286	\$28.57	\$ 0.19
1983	4,662,943	\$ 7.40	\$ 7.75	\$ 7.15	1,615	\$64.58	\$ 0.07
7-YR*	11,513,442	£ 7 O1	d 7 05		1 127	ACE 00	A 0 02
_TV.	TT, 2T2, 447	\$ 7.01	\$ 7.25		4,427	\$65.00	\$ 0.02

FEDERAL OWNERSHIP

PRICE DATE	E ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977 1978	517,156 515,289	\$ 5.85 \$ 5.60	\$ 5.98 \$ 6.89	\$ 5.50 \$ 5.69	71 41	\$16.50 \$22.22	\$ 0.40
1979	1,347,174	\$ 5.54	\$ 6.65	\$ 5.19	119	\$56.23	\$ 0.28
1980	829,164	\$ 7.37	\$ 7.74	\$ 6.82	99	\$25.00	\$ 0.02
1981 1982	1,212,320 1,356,907	\$ 6.09 \$ 3.64	\$ 7.53 \$ 5.90	\$ 6.50 \$ 5.80	123 64	\$30.25 \$18.00	\$ 0.03
1983	6, 797, 400	\$ 5.95	\$ 7.48	\$ 6.66	380	\$75.00	\$ 0.02
7-YR*	12,575,410	\$ 5.74	\$ 7.15		897	\$75.00	\$ 0.02

^{* -} See Multi-Year Averages, Etc. description contained in Glossary of Terms.

NONFEDERAL OWNERSHIP - 70%

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977	875,052	\$ 5.11	\$ 5.03	\$ 4.78	498	\$ 9.69	\$ 3.00
1978	289,634	\$ 6.79	\$ 6.72	\$ 6.67	158	\$11.00	\$ 5.00
1979	1,317,960	\$ 5.60	\$ 6.77	\$ 7.21	320	\$10.50	\$ 4.73
1980	1,087,138	\$ 6.48	\$ 6.71	\$ 6.67	348	\$10.36	\$ 4.78
1981	840,543	\$ 7.60	\$ 7.53	\$ 7.17	444	\$12.00	\$ 5.25
1982	508,272	\$ 5.51	\$ 6.56	\$ 6.37	200	\$10.00	\$ 4.56
1983	3,725,396	\$ 7.29	\$ 7.35	\$ 7.15	1,131	\$11.00	\$ 5.30
7-YR*	8,862,153	\$ 6.53	\$ 6.87		3,101	\$15.00	\$ 3.76

FEDERAL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977	386,525	'\$ 5 . 06	\$ 5.61	\$ 5.50	49	\$ 8.33	\$ 4.27
1978	480,516	\$ 5.58	\$ 6.12	\$ 5.69	29	\$10.48	\$ 5.00
1979	1,079,309	\$ 5.42	\$ 5.67	\$ 5.19	83	\$10.00	\$ 4.38
1980	659,745	\$ 7.54	\$ 7.07	\$ 6.82	69	\$11.54	\$ 5.29
1981	812,071	\$ 6.97	\$ 6.80	\$ 6.50	87	\$11.00	\$ 5.00
1982	605,201	\$ 3.91	\$ 5.56	\$ 5.80	44	\$ 8.68	\$ 4.44
1983	4,690,843	\$ 6.30	\$ 6.80	\$ 6.66	266	\$10.01	\$ 5.07
		•					
7-YR*	9,088,259	\$ 6.01	\$ 6.53		627	\$13.00	\$ 4.00

This difference can be attributed to many things, including the conditions contained in the public permit. Overall the substance of the public permit is viewed, for the most part, as comparable to the private lease in light of the general conditions in the private leases.

In the negotiated market, any advantage held by the private lessee over the public permittee as a result of the "looseness" of terms and conditions is at least partially offset by the lack of documentable tenure indicated by the private lease market, combined with the appeal rights and availability of nonuse available to the public permittee. In no case, however, were any private leases discovered that contained the rigid stipulations contained in

^{* -} See Multi-Year Averages, Etc. description contained in Glossary of Terms.

the public permit. Based on the additional requirements (meetings with FS or BLM personnel, stocking requirements on base property, etc.) placed on the public permittee/lessee, it is the opinion of the appraisers that a slight deficiency exists in the public permit as it compares to the typical private lease. This deficiency will be expressed as a five percent downward adjustment (entitled conditions of use) of the private land lease rate, which is derived from the private lease market, resulting in an opinion of fair market value for grazing use on public rangelands. This adjustment is supported by the above comparison of federal and nonfederal leases.

Analysis of National Grasslands

Section 11, PRIA, excludes the National Grasslands from the PRIA fee system. However, in 1979, the FS adopted the concepts and principles of the PRIA fee system for the National Grasslands. The assignment was to estimate the fair market value of grazing on the public rangelands under the jurisdiction of the FS and BLM within the 16 western states. Scattered parcels of public lands (BLM) adjoin or are in close proximity to National Grasslands. For these reasons the National Grasslands, under the jurisdiction of the FS, are included in this appraisal report.

The terms and conditions of grazing use on National Grasslands differ somewhat from the terms and conditions of grazing use on National Forest lands and public lands (BLM). A chart comparing the relative composition of each type of permitted use is included in the description of the "Rights Appraised" section of the appraisal. The primary differences are:

- 1. The base property must be within the area of which the National Grasslands are a part.
- 2. Permittees can, and do, offset a portion of the costs of the required conservation practices (range improvements) as credit against the grazing value as "payment in kind", with some local limits imposed as to how much or what percent of the total fees can be offset.
- 3. Permittees can deduct the grazing association administrative costs from the grazing values to the extent that these costs would otherwise be costs to the FS. Local limits are placed on kinds and amounts of costs which can be credited. (The grazing value is the beginning figure from which administrative costs and conservation practice costs are deducted, the residual being the grazing fee.)

Most Grassland users belong to a grazing association operating under terms of a grazing agreement. In most cases, where this situation exists, the members pay an additional \$2.00 to \$3.00 per animal month to support the association's activities. This additional money is not offset against the grazing fees.

Portions of the grazing association dues are similar to membership dues paid to livestock organizations by users of nonfederal lands. These dues are used for the association officers or to send representatives to industry meetings, promoting the livestock industry, lobbying activities, etc. Such activities are not a requirement of the Federal Government, but are the normal activities that any specialized business group might pursue. The remainder of the members' dues cover the costs of items that are typically paid by lessees in the private market, in addition to the rental they pay to the lessors. For these reasons, association dues are not considered as an item that requires an adjustment in comparing the Grassland grazing use with private transactions.

These deductions for required conservation practices (for rangeland improvement work,) are in addition to the credit for nonfee costs built into the 1969 fee system and the 1978 PRIA formula.

Other public rangelands are intermingled with the National Grasslands.

Assuming the conditions of BLM, FS and National Grassland grazing permits are similar, the value of grazing on the National Grasslands should be the same.

VALUATION BY PRICE AREA FOR CATTLE AND HORSES

General

The data describing the public rangelands and the grazing use on the public rangelands withir each price area are summarized in a series of charts in the individual price area valuation sections which follow.

The transaction data within each price area were analyzed and processed to provide indications of the value of grazing (i.e., the private grazing land lease rate) for mature cattle and horses for the price area. The methods used to process the data were described in the section entitled, "General Description of Transaction Data Analysis." The private grazing land lease rates are further analyzed to derive a final estimate of rental value for grazing cattle and horses for each price area. Public rangeland grazing use is then compared to the private land lease rate to develop estimates of value for grazing mature cattle and horses on the public rangelands.

These analyses are based on average prices for different segments of the 7-year period covered by the transaction data. A chart contained in the valuation section for each price area displays the average prices for the entire 7-year period; average for the 6-year period, covering 1978 through 1983; 5-year period, 1979 - 1983; 4-year period, 1980-1983; 3-year period, 1981-1983; 2-year period, 1982-1983; and the average price for the most recent year, 1983.

The estimates of the private land lease rate for each price area are based on analyses of transactions involving nonfederal lands.

The estimate of fair market rental value of grazing on public rangelands are then derived by adjusting the private land lease rates to reflect differences between the use on the nonfederal lands versus that on the public rangelands. The transaction data for leases involving federal lands are used as a check against the final estimates of value of grazing use on the public rangelands derived by adjusting the estimate of private land lease rate.

VALUATION

MATURE CATTLE AND HORSES

PRICE AREA 1





PRICE AREA 1 MATURE CATTLE & HORSES

Price Area 1

Physical Description

Price Area 1 includes the easterly two-thirds of North Dakota, all of South Dakota, a portion of southeast Wyoming, counties in Nebraska north of the Platte River and the Colorado line, and Weld County, Colorado. This area includes some of the more productive range in the western United States. Precipitation is generally 20 inches or more with a growing season of more than 250 days. Population densities are generally low, with topography ranging from essentially level to hilly. Winter can be quite severe with high winds, cold temperatures and snow, causing some hazard to livestock in the early spring and fall.

This price area generally covers portions of the short- and tall-grass prairie provinces. Grazing in this area is generally during the spring, summer, and fall.

Public Rangeland Data

The data regarding the public rangelands within Price Area 1 and the grazing use on these lands is summarized in Tables 1, 2, and 3 contained in the following three pages.

Table MC-1-1.

	ADMIN BY BLM	NF	NGL	TOTALS	% OF ALLPUB RGLNDS
GROSS ACRES	944,260	1,451,046	1,277,310	3,622,616	1.2%
ACRES IN ALLOTS	894,367	1,434,303	1,204,614	3,533,284	1.4%
# OF CATTLE ALLOTS	757	272	633	1,662	7.0%
# OF SHEEP ALLOTS	81		1	82	3.0%
# OF HORSE ALLOTS	3	1	2	6	1.8%
# OF MIXED ALLOTS	128	3	15	146	4.1%
TOTAL ALLOTMENTS	969	276	651	1,896	6.3%
# OF PERMITS	974	406	517	1,897	5.9%
# OF OPERATORS	1,029	399	746	2,174	6.5%
ACT CATT AUMs/AMs	151,853	194,157	413,163	759,173	4.3%
ACT SHEEP AUMs/AMs	44,577		2,713	47,290	1.0%
ACT HORSE AUMs/AMs		267	594	861	1.1%
ACT OTHER AUMS/AMS	128		3,511	3,639	7.4%
TOTAL AUMS/AMS	196,558	194,424	419,981	810,963	3.5%
LARGEST PERMIT	4,768 AUMs	4,541 AMs	7,840 AMs		
SMALLEST PERMIT	2 AUMs	2 AMs	3 AMs		
RGE OF SIZE (60%)	3-697 AUMs	36-2,966 AMs	25-1,550 AMs		
BEST STK RATE	1 Ac/AUM	1 Ac/AUM	1 Ac/AUM		
WORST STK RATE	20 Ac/AUM	45 Ac/AUM	99 Ac/AUM		
60% RANGE STK RATE	2-12 Ac/AUM	2-45 Ac/AUM	1-15 Ac/AUM		
AVERAGE STK RATE	4.55 Ac/AUM	7.38 Ac/AUM	2.87 Ac/AUM	4.36 Ac/AUM	

Table MC-1-2.

Public Rangeland Tracts or Allotments

By Size and Administrative Category

SIZE CLASS	BLM	TRACTS OR A NF Number -	ALLOTMENTS NGL	TOTAL	%
0-160	426	7	74	507	26.7%
161-640	243	20	124	387	20.4%
641-2,000	169	83	236	488	25.7
2,001-10,000	123	128	209	460	24.3
10,001-100,000	8	38	8	54	2.8%
100,001-500,000				-	
500,001-1,000,000					
Over 1,000,000					and the
TOTALS	969	276	651	1,896	

Table MC-1-3.

Number of Public Rangeland Operators

In Different Size Classes, By Administrative Category

SIZE CLASS AUMs(BLM)	NUMBER OF	OPERATORS	IN SIZE CLASSE	S* TOTAL	% OF
AMS (FS)	BLM	NF	NGL	TOTALS	OPERATORS
0**	0	0	0	0	
1-100	584	77	20	681	32.4%
101-500	267	215	149	631	30.0%
501-1,000	65	59	106	230	10.9%
1,001-2,000	37	31	44	112	5.3%
2,001-3,000	5	9	0	14	0.7%
3,001-4,000	0	5	0	5	0.2%
4,001-5,000	2	3	8	13	0.6%
5,001-15,000	0	0	34	34	1.6%
15,001-25,000	0	0	251	251	11.9%
25,000 PLUS	0	O	134	134	6.4%
TOTALS	960	399	746	2,105***	100.0%

^{*} A permit may be issued to a single operator or to a grazing association with several member operators.

The summaries contained in Tables 1, 2, and 3 show that the public rangelands within this price area consist of some 1,896 tracts or allotments ranging in size from less than 160 acres to between 10,000 and 100,000 acres. Forty seven percent (894) of the tracts are 640 acres or less in size. Fifty percent (948) of the tracts are between 641 and 10,000 acres in size. The remaining 2.8 percent (54) tracts are larger than 10,000 acres.

^{**} Operators having ephemeral permits and trailing permits.

^{***} Another counting of operators within the price area is given as 2,174.

The grazing use by individual permittees ranges from a low of 2 animal months to a high of 7,840 animal months. Thirty-two percent (681) of the operators have 100 AUMs/AMs or less of use. Approximately 46 percent (973) operators have between 101 and 2000 AUMs/AMs. The use by the remaining 22 percent (451) operators ranges from 2001 AUMs/AMs to over 25,000 AUMs/AMs.

The stocking rates on these lands range from a high of 1 acre/AUM to a low of more than 99 acres/AUM. The overall average stocking rate for all of the public rangelands within this price area is approximately 4.36 acres/AUM.

Most of the tracts have public access and on-site sources of stock water. Access to other tracts is controlled by the adjoining landowners. Stock water for some of the tracts is provided by sources on adjoining lands, usually owned or controlled by the public rangeland permittees/lessees.

Table MC-1-4.

MATURE CATTLE AND HORSES SUBFILES: D, F-J - 70% TRANSACTIONS

ALL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
					4		
1977	30,770	\$ 8.82	\$ 7.99	\$ 8.33	17	\$13.33	\$ 4.04
1978	25,940	\$10.01	\$ 9.90	\$10.00	16	\$13.00	\$ 9.52
1979	153,772	\$ 8.96	\$ 8.04	\$ 8.20	63	\$13.00	\$ 5.00
1980	80,942	\$ 9.35	\$ 8.79	\$10.00	41	\$14.00	\$ 5.71
1981	140,568	\$11.28	\$11.05	\$12.00	91	\$15.14	\$ 9.00
1982	8,760	\$ 8.76	\$ 7.35	\$ 8.00	7	\$10.00	\$ 5.00
1983	121,484	\$ 9.46	\$10.22	\$10.00	66	\$15.00	\$ 8.10
7-YR*	562,718	\$10.01	\$ 9.66	\$10.00	301	\$15.00	\$ 7.00

NONFEDERAL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977	7,150	\$ 8.94	\$ 8.65	\$ 8.33	11	\$13.33	\$ 6.26
1978	16,380	\$ 8.64	\$ 9.11	\$ 9.60	14	\$12.57	\$ 7.00
1979	79,493	\$10.13	\$ 8.10	\$ 8.33	47	\$13.00	\$ 4.80
1980	62,008	\$ 9.60	\$ 8.72	\$10.00	38	\$14.25	\$ 5.00
1981	137,648	\$11.33	\$11.01	\$12.00	91	\$15.14	\$ 8.85
1982	8,760	\$ 8.76	\$ 7.35	\$ 8.00	7	\$10.00	\$ 5.00
1983	117,024	\$ 9.37	\$10.20	\$10.00	63	\$15.00	\$ 8.32
7-YR*	438,965	\$10.17	\$ 9.76	\$10.00	271	\$15.00	\$ 7.08

FEDERAL OWNERSHIP

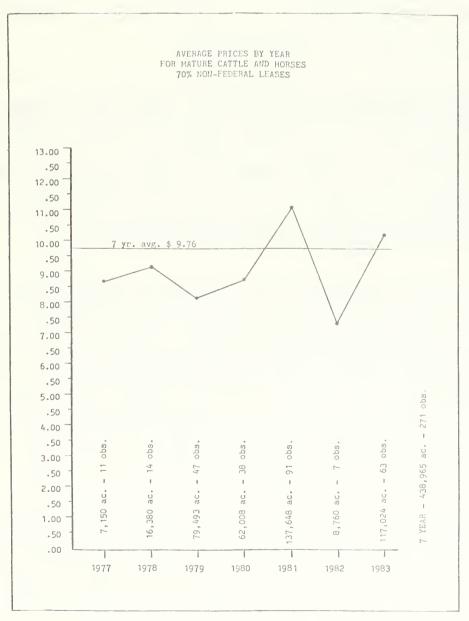
P	RICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
_	977	18,300	\$ 8.29	\$ 6.59	\$ 6.19	4	\$10.00	\$ 4.04
1	978	5,200	\$13.81	\$13.58	\$13.58	2	\$15.15	\$15.15
_	979	63,799	\$ 8.99	\$ 7.84	\$ 6.47	16	\$12.87	\$ 5.36
	980	11,467	\$ 9.81	\$ 9.46	\$ 9.38	3	\$10.00	\$ 9.38
	981 983	5,900	\$12.97	\$13.05	\$13.05	2	\$17.09	\$ 9.00
	703	9,600	\$10.40	\$11.03	\$10.50	3	\$16.60	\$ 6.00
7	-YR*	123,753	\$ 9.42	\$ 8.74	\$ 9.19	30	\$13.00	\$ 6.00

^{* -} See Multi-Year Averages, Etc. description contained in Glossary of Terms.

Table MC-1-5.

SUMMARY OF MULTI-YEAR AVERAGES

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77-83 7 YR	\$ 9.76	438,463	271
78-83 6 YR	\$ 9.82	424,835	258
79–83 5 YR	\$ 9.88	405,575	244
80-83 4 YR	\$10.27	327,425	199
81-83 3 YR	\$10.57	268,777	161
82-83 2 YR	\$ 9.96	131,904	70
*83 1 YR	\$10.20	117,024	63



Estimating the Private Land Lease Rate

The prices paid for use by mature cattle and horses for the 387 transactions in the 100 percent file of nonfederal market transactions range from a low of \$0.67 to a high of \$42.28 per animal or pair month, with a median of \$10.00.

The prices paid for use for the 271 transactions (1977-1983) contained in the 70 percent file range from a low of \$4.80 (1979) to a high of \$15.14 (_981) per head or pair month. The average price for the total 7-year period, as shown by these transactions, was \$ 9.76 with a median price of \$10.00. The range of prices for the transactions considered in the 7-year average was from a low of \$7.08 and a high of \$15.00.

The averages for the 6-year period (78-83), 5-year period (79-83), 4-year period (80-83) and 3-year period (81-83) indicate a slow but steady increase in prices from 1977 through 1981. The 2-year average (82-83) indicates that the prices dropped off in 1982. The 1983 prices show a rise to near the level of the average prices paid over the 4-year period (80-83).

It is known that portions of this area have gone through a drought and a subsequent increase in moisture over the past four or five years. Although the data does not show any direct relationship between changes in availability of forage and demand with price, it is felt that the prices shown by the 4-year average (80-83) tend to level out any possible highs and lows resulting from availability, range conditions, and demand.

Placing the most weight on the 4-year average price of \$10.27, tempered by the 2-year price of \$9.96 and the 1983 price of \$10.20, it is concluded that \$10.00 per head or pair month would represent a reasonable estimate of the private lands lease rate for this price area for mature cattle and horses.

Comparison with Public Rangelands

The private land lease rate was compared to the grazing use by mature cattle and horses on public rangelands for those factors which the market investigation indicates have a bearing on value or price. The effect of some of these factors was dealt with by selecting transaction data that involve only properties having the same or similar characteristics. These comparisons are summarized in the following chart. A zero indicates that a price adjustment between the private land lease rate and public rangeland grazing was not necessary because the factor was comparable for both land categories.

Comparison Chart

Time	Location	Size	Water			Improvement Maintenance	Improvement Construction
0	0	0	0	0	-5%	0	0

- Time The private land lease rate was estimated as of the date of this appraisal.
- Location The private land lease rate was based on transactions within the same price area as the public rangelands to which the rate applies.
- The public rangelands are an aggregation of tracts or allotments that are in the same general size range as the properties involved by the transactions in the price area.
- Animal Type The transactions considered in arriving at the private land lease rate for mature cattle and horses were limited to those involving mature cattle and horses.
- Conditions The conditions of use on public lands as compared to those of Use found on the private lands were analyzed in the section entitled, "Comparison of Private Leases to Public Permit," in an earlier section of this report. This analysis indicated the need to make a downward adjustment of five percent to reflect the differences in conditions of use.
- Improvement The comparison is based on the condition that the landowner in Maintenance the private sector and for the public rangelands provides the materials and the lessee or permittee/lessee performs the work.

Improvement - The comparison is based on the condition that the landowner Construction does all range improvement construction.

The \$10.00 private land lease rate is adjusted downward by five percent. The result is \$9.50 ($$10.00 \times .95$). The fair market value of grazing use by mature cattle and horses on public rangelands within Price Area 1 is estimated to be \$9.50 per head or pair month.

Comparison of Adjusted Price to Prices Involving Federal Lands

Table 6

SUMMARY OF MULTI-YEAR AVERAGES

MATURE CATTLE 70% FEDERAL OWNERSHIP

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77-83 7 YR	\$ 8.74	123,753	30
78-83 6 YR	\$ 9.21	105,053	26
79-83 5 YR	\$ 8.59	98, 253	24
80-83 4 YR	\$ 9.65	26,174	6
81-83 3 YR	\$12.03	8,600	3
82-83 2 YR	\$11.03	9,600	3
83 1 YR	\$11.03	9,600	3

Table 6 shows the average prices paid for use on lands in federal ownership for the entire 7-year period to be \$8.74 per head or pair month for mature cattle and horses in this price area. The 4-year (80-83) average was \$ 9.65; 3-year (81-83), \$12.03; 2-year (82-83), \$11.03; and the 83 average was also \$11.03.

One of two situations involving public rangelands in which fees are established by competitive bidding is located within this price area. This involves a relatively small amount of acreage in the old Fort Meade Military Reservation located near Sturges, South Dakota. The weighted average prices (weighted by AUMs) were \$7.30 for years 1973-77 and \$11.41 for 1978 through 1980. The prices were \$16.89 for 1981, \$14.35 for 1982, and \$15.17 for 1983. As the result of bids in March 1984, the weighted average price for 1984 through 1986 will be \$11.84. The weighted average price for Fort Meade over a 14-year period (including 84-86) is \$10.93.

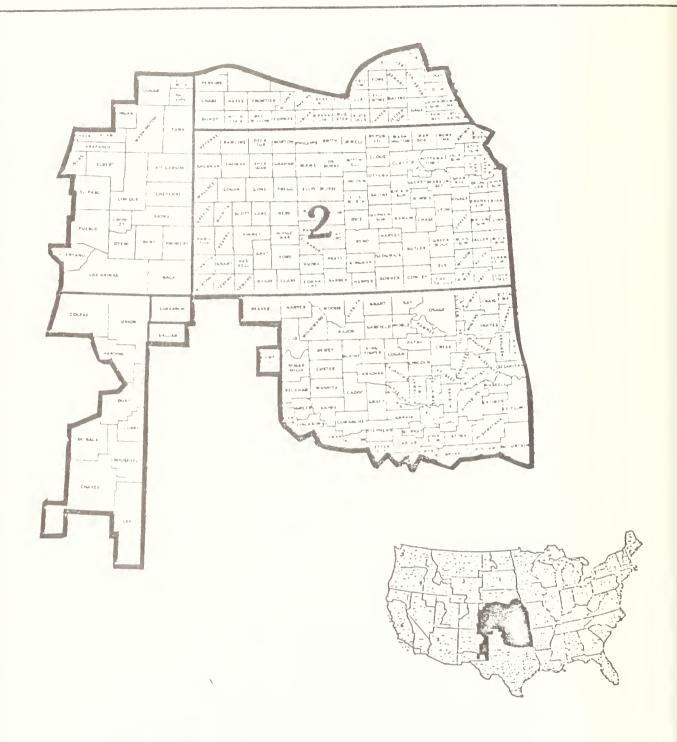
The average prices for federal lands in this area are heavily influenced by the prices paid for the Fort Meade grazing use. It is recognized that the Fort Meade grazing is superior to that found on the National Forest lands and the BLM lands. It is comparable to the grazing on the National Grasslands.

The \$9.50 value of grazing on public lands, derived by adjusting the private lands lease rate of \$10.00 downward by 5 percent to reflect differences between the conditions on public rangelands, is 76 cents above the 7-year average for federal lands and 15 cents lower than the prices shown for the past four years and more recent years. Therefore, it is felt that the adjustment is more than adequate to reflect any possible differences.

VALUATION

MATURE CATTLE AND HORSES

PRICE AREA 2



PRICE AREA 2 MATURE CATTLE AND HORSES

Price Area 2

Physical Description

Price Area 2 is located immediately south of Price Area 1, beginning in Nebraska at the Platte River and extending southward through Oklahoma to the North Texas border, but including Dallam and Hemphill Counties in Texas. (Both of these Texas counties contain National Grasslands under administration of Region 3, FS). The eastern boundary is Oklahoma-Arkansas border, extending west to central Colorado. The western boundary approximates the "Front Range" of the Eastern Rocky Mountains, separating the mountainous area from the southern prairie. The southerly boundary is ragged, extending along the southern county lines of Lea and Chaves Counties, New Mexico, then extending north along the Texas-New Mexico Border to the southern boundary of Dallam County, Texas; the eastern boundary of Cimarron County, Oklahoma; east along the Kansas-Oklahoma border; and then south along the western and southern boundary of Beaver County, Oklahoma, before returning to the Oklahoma-Texas border. This boundary then extends south to the southern boundary of Oklahoma and east to the Arkansas line. The topography of the area is similar to Price Area 1 except that it is more mountainous in its westerly area. The eastern portion of this pricing area is a continuation of the tall-grass prairie province, with the western portion in the drier and hotter Great Plains short-grass prairie province. Grazing in this area is generally during the spring, summer, and fall.

Public Rangeland Data

The data regarding the public rangelands within Price Area 2 and the grazing use on these lands is summarized in Tables 1, 2, and 3 contained in the following three pages.

	ADMIN BY BLM	NF	NGL	TOTALS	% OF ALLPUB RGLNDS
GROSS ACRES	1.809,326	342,405	776,735	2,928,466	1.0%
ACRES IN ALLOTS	1,713,232	318,186	770,402	2,801,820	1.1%
# OF CATTLE ALLOTS	429	17	527	973	4.1%
# OF SHEEP ALLOTS	5	6	0	11	.004%
# OF HORSE ALLOTS	1	1	1	3	.009%
# OF MIXED ALLOTS	62	2	0	64	1.8%
TOTAL ALLOTMENTS	497	26	528	1,051	3.5%
# OF PERMITS	494	27	508	1,029	3.2%
# OF OPERATORS	485	27	510	1,022	3.0%
ACT CATT AUMs/AMs	301,157	6,725	192,058	499,940	2.8%
ACT SHEEP AUMS/AMS	48,485	144	0	48,629	1.0%
ACT HORSE AUMS/AMS	1,539	0	30	1,569	2.0%
ACT OTHER AUMS/AMS	357	4,392	0	4,749	9.6%
TOTAL AUMS/AMS	351,538	11,261	192,088	554,887	2.4%
LARGEST PERMIT	11,355 AUMs	3,300 AMs	3,504 AMs		
SMALLEST PERMIT	1 AUMs	7 AMs	5 AMs		
RGE OF SIZE (60%)	1-1968 AUMs	17-2304 AMs	48-2,262 AMs		
BEST STK RATE	l Ac/AUM	2 Ac/AUM	l Ac/AUM		
WORST STK RATE	99 Ac/AUM	16 Ac/AUM	20 Ac/AUM		
60% RANGE STK RATE	1-99 Ac/AUM	2-16 Ac/AUM	1-06 Ac/AUM		
AVERAGE STK RATE	4.87 Ac/AUM	28.26 Ac/AUM	4.01 Ac/AUM	5.05 Ac/AUM	

Table MC-2-2.

Public Rangeland Tracts or Allotments

By Size and Administrative Category

SIZE CLASS	BLM	TRACTS OR A NF Number -	LLOTMENTS NGL	TOTAL	%
0–160	127		81	208	19.8%
161-640	104		164	268	25.5%
641-2,000	90	2	171	263	25.0
2,001-10,000	129	13	105	247	23.5
10,001-100,000	47	11	7	65	6.2%
100,001-500,000		drape drape		Çingin diran	
500,001-1,000,000	-	400			
Over 1,000,000					
TOTALS	497	26	528	1,051	

Table MC-2-3.

Number of Public Rangeland Operators

In Different Size Classes, By Administrative Category

SIZE CLASS AUMs(BLM) AMs (FS)	NUMBER BLM	OF OPERATORS I	n size clas	SSES* TOTALS	% OF TOTAL OPERATORS
0**	0	0	2	2	0.2%
1-100	243	15	62	320	31.7%
101-500	94	6	142	242	24.0%
501-1,000	44	2	23	69	6.8%
1,001-2,000	44	2	5	51	5.1%
2,001-3,000	21	1	56	78	7.7%
3,001-4,000	11	1	1	13	1.3%
4,001-5,000	8	0	0	8	0.8%
5,001-15,000	6	0	39	45	4.5%
15,001-25,000	0	0	128	128	12.7%
25,000 PLUS	0	0	52	52	5.2%
TOTALS	471	27	510	1,008***	100.0%

^{*} A permit may be issued to a single permittee or to a grazing association with several member operators.

^{**} Operators having ephemeral permits and trailing permits.

^{***} Another counting of operators within the price area is given as 1,022.

The summaries contained in Tables 1, 2, and 3 show that the public rangelands within this price area consist of some 1,051 tracts or allotments ranging in size from less than 160 acres to between 10,000 and 100,000 acres. Forty-five percent (476) of the tracts are 640 acres or less in size. Forty-eight percent (510) of the tracts are between 641 and 10,000 acres in size. The remaining 6.2 percent (65) tracts are larger than 10,000 acres.

The grazing use by individual permittees ranges from a low of 1 AUM to a high of 11,355 AUMs. Thirty-two percent (322) of the permittees have 100 AUMs/AMs or less of use. Approximately 36 percent (362) permittees have between 101 and 2,000 AUMs/AMs. Use by the remaining 32 percent (324) permittees ranges from 2,001 AUMs/AMs to over 25,000 AUMs/AMs.

The stocking rates on these lands range from a high of 1 acre/AUM to a low of more than 99 acres/AUM. The overall average stocking rate for all of the public rangelands within this price area is approximately 5.05 acres/AUM.

Most of the tracts have public access and on-site sources of stock water.

Access to other tracts is controlled by the adjoining landowners. Stock water

for some of the tracts is provided by sources on adjoining lands, usually

owned or controlled by the public rangeland permittees/lessees.

Table MC-2-4.

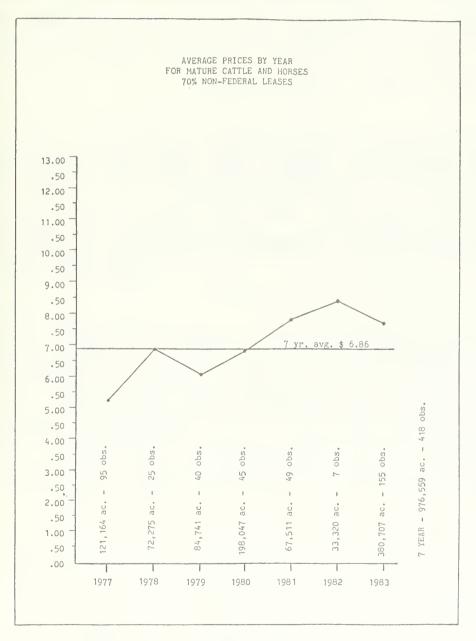
	MATUR	E CATTLE A	ND HORSES	SUBFILES: D	, F-J -	70% TRAN	SACTIONS	
			<u>A</u>	LL OWNERSHIE	-			
PRICE	DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977 1978 1979 1980 1981 1982 1983		121,694 72,275 223,523 202,447 153,531 33,320 472,467	\$ 5.17 \$ 6.69 \$ 5.84 \$ 7.17 \$ 8.65 \$ 9.80 \$ 8.52	\$ 5.30 \$ 6.82 \$ 5.82 \$ 6.73 \$ 7.86 \$ 8.43 \$ 7.68	\$ 4.92 \$ 6.67 \$ 5.15 \$ 6.66 \$ 7.55 \$10.00 \$ 7.54	96 25 49 46 57 7 162	\$10.00 \$12.50 \$ 8.53 \$10.00 \$12.00 \$11.00 \$11.80	\$ 3.50 \$ 4.76 \$ 4.27 \$ 5.15 \$ 6.00 \$ 5.83 \$ 6.00
7-YR*		1,372,452	\$ 7.55	\$ 6.85	\$ 6.89	440	\$11.00	\$ 5.00
			NONFE	DERAL OWNER	SHIP			
PRICE	DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977 1978 1979 1980 1981 1982 1983		121,164 72,275 84,741 198,047 67,511 33,320 380,707	\$ 5.17 \$ 6.69 \$ 6.75 \$ 7.23 \$ 7.90 \$ 9.80 \$ 8.59	\$ 5.29 \$ 6.82 \$ 6.04 \$ 6.78 \$ 7.78 \$ 8.43 \$ 7.70	\$ 4.83 \$ 6.67 \$ 6.06 \$ 6.67 \$ 7.55 \$10.00 \$ 7.50	95 25 40 45 49 7 155	\$10.00 \$12.50 \$ 8.53 \$10.00 \$12.00 \$11.00 \$12.00	\$ 3.50 \$ 4.76 \$ 4.27 \$ 5.33 \$ 6.00 \$ 5.83 \$ 6.00
7-YR*		976,559	\$ 7.66	\$ 6.86	\$ 6.89	418	\$11.00	\$ 5.00
			FED	ERAL OWNERSH	IIP			
PRICE	DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977 1979 1980 1981 1983		530 105,700 5,189 66,319 72,050	\$ 6.00 \$ 4.38 \$ 4.00 \$ 9.19 \$ 7.97	\$ 6.00 \$ 4.40 \$ 4.00 \$ 8.27 \$ 7.81	\$ 6.00 \$ 4.38 \$ 4.00 \$ 7.73 \$ 7.81	1 7 1 6 7	\$ 6.00 \$ 4.50 \$ 4.00 \$10.42 \$ 9.74	\$ 6.00 \$ 4.38 \$ 4.00 \$ 7.00 \$ 7.31

7-YR* 288,741 \$ 6.96 \$ 6.69 \$ 6.50 24 \$10.00 \$ 4.38

^{* -} See Multi-Year Averages, Etc. description contained in Glossary of Terms.

Table MC-2-5.

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77-83 7 YR	\$ 6.86	976,559	418
78-83 6 YR	\$ 7.28	839,877	321
79–83 5 YR	\$ 7.32	767,842	296
80-83 4 YR	\$ 7.53	678,653	256
81-83 3 YR	\$ 7.74	502,203	211
82-83 2 YR	\$ 7.72	415,552	160
83 1 YR	\$ 7.70	380,707	155



Estimating the Private Land Lease Rate.

The prices paid for use by mature cattle and horses for the 387 transactions contained in the 100% file of nonfederal market transactions range from a low of \$0.13 to a high of \$40.50 per animal or pair month, with a median of \$6.89.

The prices paid for use for the 418 transactions (1977-1983) contained in the 70% file range from a low of \$3.50 (1977) to a high of \$12.50 (1978) per head or pair month. The average price for the total 7-year period, as shown by these transactions, was \$ 6.86 with a median price of \$6.89. The range of prices for the transactions considered in the 7-year average was from a low of \$5.00 and a high of \$11.00.

The averages for the 6-year period (78-83), 5-year period (79-83), 4-year period (80-83) and 3-year period (81-83) indicate a slow but steady increase in prices from 1977 through 1981. The 2-year average (82-83) and the average price for 1983 show a drop, of \$ 0.02 and \$0.04 respectively, from the average price of 81-83, indicating a leveling of prices in the past three years.

Portions of this area have gone through a drought and a subsequent increase in moisture over the past four or five years. Although the data does not show any direct relationship between availability of forage and price, it is felt that the prices shown by the 4-year average (80-83) would tend to level out any possible highs and lows resulting from availability, range conditions, and demand.

Placing the most weight on the 4-year average price of \$7.53, tempered by the 2-year average price of \$7.72 and the 1983 price of \$7.70, it is concluded that \$7.50 per head or pair month would represent a reasonable estimate of the private lands lease rate for this price area for mature cattle and horses.

Comparison with Public Rangelands

The private land lease rate was compared to the grazing use by mature cattle and horses on public rangelands for those factors which the market investigation indicates have a bearing on value or price. The effect of some of these factors was dealt with by selecting transaction data that involve only properties having the same or similar characteristics. These comparisons are summarized in the following chart. A zero indicates that a price adjustment between the private land lease rate and public rangeland grazing was not necessary because the factor was comparable for both land categories.

Comparison Chart

						Improvement	
Time	Location	Size	Water	Type	of Use	Maintenance	Construction
0	0	0	0	0	-5%	0	0

The same narrative descriptions of the graphic comparisons or ratings given in Price Area 1 apply here.

The \$7.50 private land lease rate is adjusted downward by five percent. The result is \$7.13 ($\$7.50 \times .95$). The fair market value of grazing use by mature cattle and horses on public rangelands within Price Area 2 is estimated to be \$7.10 per head or pair month.

Table MC-2-6.

SUMMARY OF MULTI-YEAR AVERAGES

MATURE CATTLE 70% FEDERAL OWNERSHIP

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77–83 7 YR	\$ 6.69	288,741	24
78-83 6 YR	\$ 6.72	288,211	23
79–83 5 YR	\$ 7.00	288,211	23
80-83 4 YR	\$ 7.83	165,729	16
81-83 3 YR	\$ 7.98	165,089	15
82-83 2 YR	\$ 7.81	72,050	7
83 1 YR	\$ 7.81	72,050	7

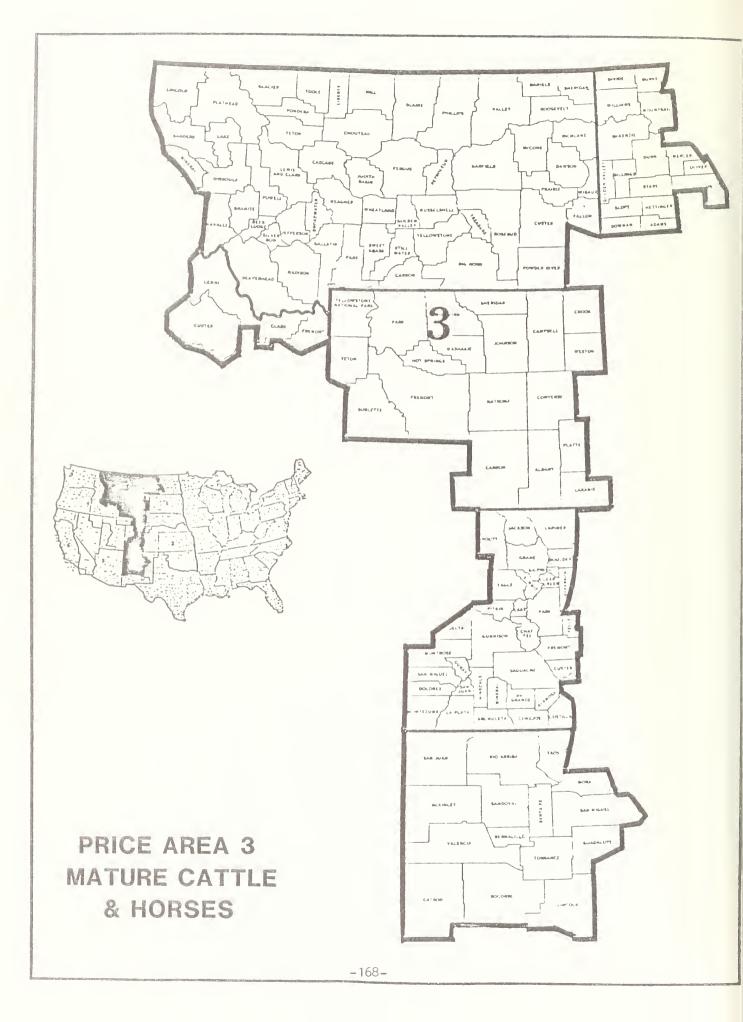
Table 6 shows the average prices paid for use on lands in federal ownership for the entire 7-year period to be \$6.69 per head or pair month for mature cattle and horses in this price area. The 4-year (80-83) average was \$ 7.83; 3-year (81-83) was \$7.98; 2-year (82-83) was \$7.81; and the 83 average was also \$7.81.

The \$7.10 value of grazing on public lands, derived by adjusting the private lands lease rate of \$7.50 downward by five percent to reflect differences between the conditions on public rangelands, is 41 cents above the 7-year average for federal lands and 73 cents lower than the prices shown for the past four years and more recent years. Therefore, it is felt that the adjustment is more than adequate to reflect any possible differences.

VALUATION

MATURE CATTLE AND HORSES

PRICE AREA 3



Price Area 3

Physical Description

Price Area 3 includes the western third of North Dakota, all of Montana, a portion of east-central Idaho, all of Wyoming (except the three southwestern-most counties and two counties in the east-central portion of the state bordering on Nebraska and South Dakota), all of the mountainous part of Colorado (except the four northwestern-most counties), and all of the mountainous area of New Mexico, leaving the desert area of the southern and eastern portions of the state in other pricing areas. This pricing area is made up of mountainous areas with coniferous forests and mountain meadows, the prairies of eastern Montana and Wyoming, the Missouri River Breaks of northeastern Montana, and a portion of the grassland prairie of western North Dakota. The grazing seasons in this pricing area are limited by weather with severe winters and mild summers.

The vegetative cover of this pricing area is dominated by the Great Plains short-grass prairie province in its northeastern area, and mixed conifer forests with mountain parks in the remaining mountainous areas. The topographic characteristics are generally quite mountainous, with the exception of the Missouri River Breaks in north-central Montana and the gently rolling prairie to the south and east. The Missouri River Breaks surface area is broken, with numerous deep drainages extending to the Ft. Peck reservoir. Frost-free days in this pricing area run from less than 100 in the northern portion of the area to more than 250 in the southern areas. Price Area 3 is usually quite dry with precipitation generally in the 10- to 15-inch range. Winters can be quite severe with blizzard conditions relatively common during the winter. The summers are typically very warm and dry except for summer thunderstorms, which on occasion can cause flash flooding. Grazing in this area is generally during the spring, summer, and fall.

Public Rangeland Data

The data regarding the public rangelands within Price Area 3 and the grazing use on these lands is summarized in Tables 1, 2, and 3 contained in the following three pages.

Table MC-3-1.

	ADMIN BY BLM	NF	NGL	TOTALS	% OF ALLPUB RGLNDS
GROSS ACRES	35,714,386	44,290,921	1,600,449	81,605,756	26.5%
ACRES IN ALLOTS	34, 247, 883	30,617,737	1,570,868	66, 436, 488	26.7%
# OF CATTLE ALLOTS	7,932	2,227	531	10,690	45.3%
# OF SHEEP ALLOTS	496	562	16	1,074	38.9%
# OF HORSE ALLOTS	93	100	2	195	58.2%
# OF MIXED ALLOTS	1,896	96	89	2,081	58.2%
TOTAL ALLOTMENTS	10,417	2,985	638	14,040	46.4%
# OF PERMITS	9,370	4,179	11	13,560	42.0%
# OF OPERATORS	9,804	4,010	782	14,596	43.3%
ACT CATT AUMs/AMs	3,573,101	1,916,546	480, 285	5,969,932	33.5%
ACT SHEEP AUMs/AMs	752,295	842,816	141,455	1,736,566	35.3%
ACT HORSE AUMs/AMs	25,957	5,874	4,832	36,663	47.2%
ACT OTHER AUMS/AMS	1,644	17,720	0	19,364	39.2%
TOTAL AUMs/AMs	4,352,997	2,782,956	626,572	7,762,525	34.0%
LARGEST PERMIT	107,227AUMs	34,722 AMs	13,419 AMs		
SMALLEST PERMIT	l AUMs	l AMs	l AMs		
RGE OF SIZE (60%)	1-7363 AUMs	1-3528 AMs	18-1296 AMs	•	
BEST STK RATE	1 Ac/AUM	1 Ac/AUM	l Ac/AUM		
WORST STK RATE	99 Ac/AUM	99 Ac/AUM	13 Ac/AUM		
60% RANGE STK RATE	1-66 Ac/AUM	1-99 Ac/AUM	2-13 Ac/AUM		
AVERAGE STK RATE	7.87 Ac/AUM	11.00 Ac/AUM	2.51 Ac/AUM	8.56 Ac/AUM	

Table MC-3-2.

Public Rangeland Tracts or Allotments

By Size and Administrative Category

SIZE CLASS	PUBLIC LANDS NA		ALLOTMENTS ITL. GRASSLANDS		%
0-160	2,382	150	74	2,606	18.6%
161-640	2,635	174	150	2,959	21.1%
641-2,000	2,431	285	210	2,926	20.8%
2,001-10,000	2,250	1,318	172	3,740	26.6%
10,001-100,000	697	1,048	32	1,777	12.7%
100,001-500,000	19	10		29	0.2%
500,001-1,000,00	0 2			2	
Over 1,000,000	1			1	
TOTALS	10,417	2,985	638	14,040	

Table MC-3.3.

Number of Public Rangeland Operators

In Different Size Classes, By Administrative Category

SIZE CLASS AUMs(BLM)	NUMBER	OF OPERATORS	IN SIZE CLAS	SES*	% OF
AMs (FS)	BLM	NF	NGL	TOTALS	OPERATORS
0**	260	31	0	291	2.0%
1-100	4,513	964	167	5,644	38.2%
101-500	3,334	1,641	237	5,212	35.3%
501-1,000	947	692	165	1,804	12.2%
1,001-2,000	597	371	125	1,093	7.4%
2,001-3,000	222	109	43	374	2.5%
3,001-4,000	62	52	2	116	0.8%
4,001-5,000	53	29	1	83	0.6%
5,001-15,000	81	44	3	128	0.9%
15,001-25,000	4	7	0	11	0.1%
25,000 PLUS	1	3	0	4	0.0%
TOTALS	10,074	3,943	743	14,760***	100.0%

^{*} A permit may be issued to a single operator or to a grazing association with several member operators.

^{**} Operators having ephemeral permits and trailing permits.

^{***} Another counting of operators within the price area is given as 14,596.

The summaries contained in Tables 1, 2, and 3 show that the public rangelands within this price area consist of some 14,040 tracts or allotments ranging in size from less than 160 acres to over 1,000,000 acres. Forty percent (5,565) of the tracts are 640 acres or less in size. Forty-seven percent (6,666) of the tracts are between 641 and 10,000 acres in size. Thirteen percent (1,806) of the tracts are between 10,000 and 500,000 acres in size. Of the remaining three tracts, two contain more than 500,000 acres each and the third over 1,000,000 acres.

The grazing use by individual permittees ranges from a low of 1 AUM to a high of 107,227 animal unit months. Forty percent (5,935) of the operators have 100 AUMs/AMs or less of use; approximately 55 percent (8,109) have between 101 and 2000 AUMs/AMs. Use by the remaining five percent (16) ranges from 2001 AUMs/AMs to over 25,000 AUMs/AMs.

The stocking rates on these lands range from a high of 1 acre/AUM to a low of more than 99 acres/AUM. The overall average stocking rate for all of the public rangelands within this price area is approximately 8.56 acres/AUM.

Most of the tracts have public access and on-site sources of stock water.

Access to other tracts is controlled by the adjoining landowners. Stock water

for some of the tracts is provided by sources on adjoining lands, usually

owned or controlled by the public rangeland permittees/lessees.

Table MC-3-4.

MATURE CATTLE	AND HORSES	SUBFILES: D,	F-J -	70% TRANSACTIONS
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ALL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977	316,284	\$ 5.41	\$ 5.00	\$ 4.53	161	\$10.00	\$ 2.80
1978	323,953	\$ 6.50	\$ 6.65	\$ 6.67	73	\$10.48	\$ 4.25
1979	675,238	\$ 6.38	\$ 6.76	\$ 7.21	162	\$10.00	\$ 5.00
1980	556,935	\$ 7.45	\$ 7.33	\$ 7.50	129	\$12.00	\$ 5.00
1981	535,390	\$ 6.92	\$ 7.12	\$ 7.00	143	\$12.00	\$ 5.00
1982	182,455	\$ 7.47	\$ 7.23	\$ 7.50	105	\$10.98	\$ 5.56
1983	2,753,908	\$ 8.03	\$ 8.32	\$ 8.50	421	\$12.00	\$ 6.25
7-YR*	5,419,676	\$ 7.14	\$ 7.23	\$ 7.34	1,192	\$11.00	\$ 5.00

NONFEDERAL OWNERSHIP

PRICE DAT	E ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977	166,318	\$ 6.19	\$ 4.80	\$ 4.20	134 57	\$10.00 \$11.43	\$ 2.50 \$ 4.25
1978 1979 1980	101,173 281,070 152,423	\$ 7.60 \$ 7.18 \$ 8.03	\$ 6.90 \$ 6.98 \$ 7.44	\$ 7.00 \$ 7.23 \$ 7.83	128 100	\$10.00 \$12.00	\$ 5.94 \$ 5.00
1980 1981 1982	218, 337 73, 754	\$ 7.55 \$ 7.99	\$ 7.04 \$ 7.33	\$ 7.39 \$ 8.00	106 106 84	\$11.50 \$11.54	\$ 4.44 \$ 5.00
1983	1,575,873	\$ 8.28	\$ 8.65	\$ 9.00	325	\$12.00	\$ 6.68
7-YR*	2,666,391	\$ 7.61	\$ 7.35	\$ 7.50	934	\$11.43	\$ 5.00

FEDERAL OWNERSHIP

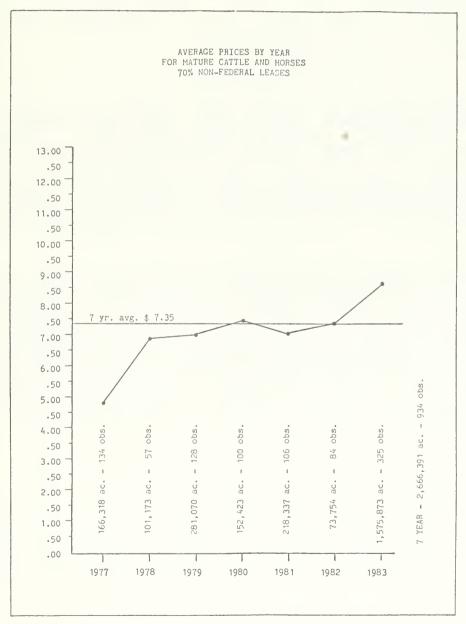
PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
2077	3.42.000	+ + =0	+ = ==	1 = ==	0.5	+ 0 20	+ 5 00
1977	143,088	\$ 4.72	\$ 5.92	\$ 5.71	25	\$ 8.39	\$ 5.00
1978	204,120	\$ 5.69	\$ 5.93	\$ 5.68	16	\$ 8.80	\$ 4.79
1979	393,568	\$ 5.84	\$ 5.90	\$ 5.66	34	\$ 9.00	\$ 4.78
1980	379,572	\$ 6.94	\$ 6.94	\$ 6.67	27	\$11.41	\$ 5.00
1981	248,389	\$ 7.35	\$ 7.26	\$ 6.76	35	\$11.25	\$ 5.75
1982	72,956	\$ 7.33	\$ 6.59	\$ 6.50	21	\$ 8.68	\$ 5.80
1983	1,011,367	\$ 7.31	\$ 7.28	\$ 7.67	96	\$10.02	\$ 5.29
7-YR*	2,522,855	\$ 6.90	\$ 6.77	\$ 6.52	258	\$10.15	\$ 5.01

^{* -} See Multi-Year Averages, Etc. description contained in Glossary of Terms.

Table MC-3-5.

SUMMARY OF MULTI-YEAR AVERAGES

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77-83 7 YR	\$ 7.66	2,666,391	934
78-83 6 YR	\$ 7.76	2,537,902	800
79–83 5 YR	\$ 7.82	2,435,609	743
80-83 4 YR	\$ 8.04	2,177,779	615
81-83 3 YR	\$ 8.15	2,022,516	515
82-83 2 YR	\$ 8.42	1,714,243	409
83 1 YR	\$ 8.65	1,575,873	325



Estimating the Private Land Lease Rate.

The prices paid for use by mature cattle and horses for the 1,334 transactions contained in the 100% file of nonfederal market transactions range from a low of \$0.02 to a high of \$50.00 per animal or pair month, with a median of \$7.34.

The prices paid for use for the 934 transactions (1977-1983) contained in the 70% file range from a low of \$2.50 (1977) to a high of \$12.00 (1978 and 1983) per head or pair month. The average price for the total 7-year period, as shown by these transactions, was \$ 7.35 with a median price of \$7.50. The range of prices for the transactions considered in the 7-year average was from a low of \$5.00 to a high of \$11.43.

The averages for the 7-year period (77-83), 6-year period (78-83), 5-year period (79-83), 4-year period (80-83) and 3-year period (81-83) indicate a slow but steady increase in prices from 1977 through 1983. The multi-year average prices go from a low of \$7.66 for the 7-year period to \$8.65 for 1983.

Although the data does not show any direct relationship between availability of forage and price, it is felt that the prices shown by the 4-year average (80-83) tend to level out any possible highs and lows resulting from availability, range conditions, and demand. Portions of this area have gone through a drought and a subsequent increase in moisture over the past four or five years.

Placing the most weight on the 4-year average price of \$8.04, it is concluded that \$8.00 per head or pair month would represent a reasonable estimate of the private lands lease rate for this price area for mature cattle and horses.

Comparison with Public Rangelands

The private land lease rate was compared to the grazing use by mature cattle and horses on public rangelands for those factors which the market investigation indicates have a bearing on value or price. The effect of some of these factors was dealt with by selecting transaction data that involve only properties having the same or similar characteristics. These comparisons are summarized in the following chart. A zero indicates that a price adjustment between the private land lease rate and public rangeland grazing was not necessary because the factor was comparable for both land categories.

Comparison Chart

Time	Location	Size	Water		Conditions Of Use	Improvement Maintenance	Improvement Construction
TIME	Docacion	0120	Hacca	1750	01 000	Harmeenance	
0	0	0	0	0	-5%	0	0

The same narrative descriptions of the graphic comparisons or ratings given in Price Area 1 apply here.

The \$8.00 private land lease rate is adjusted downward by five percent. The result is \$7.60 ($\$8.00 \times .95$). The fair market value of grazing use by mature cattle and horses on public rangelands within Price Area 3 is estimated to be \$7.60 per head or pair month.

Table MC-3-6.

SUMMARY OF MULTI-YEAR AVERAGES

MATURE CATTLE 70% FEDERAL OWNERSHIP

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77–83 7 YR	\$ 6.77	2,522,855	258
78-83 6 YR	\$ 6.86	2,401,068	231
79-83 5 YR	\$ 6.94	2,150,662	217
80-83 4 YR	\$ 7.13	1,776,217	181
81-83 3 YR	\$ 7.17	1,417,347	154
82 – 83 2 YR	\$ 7.16	1,076,936	119
83 1 YR	\$ 8.32	2,753,908	421

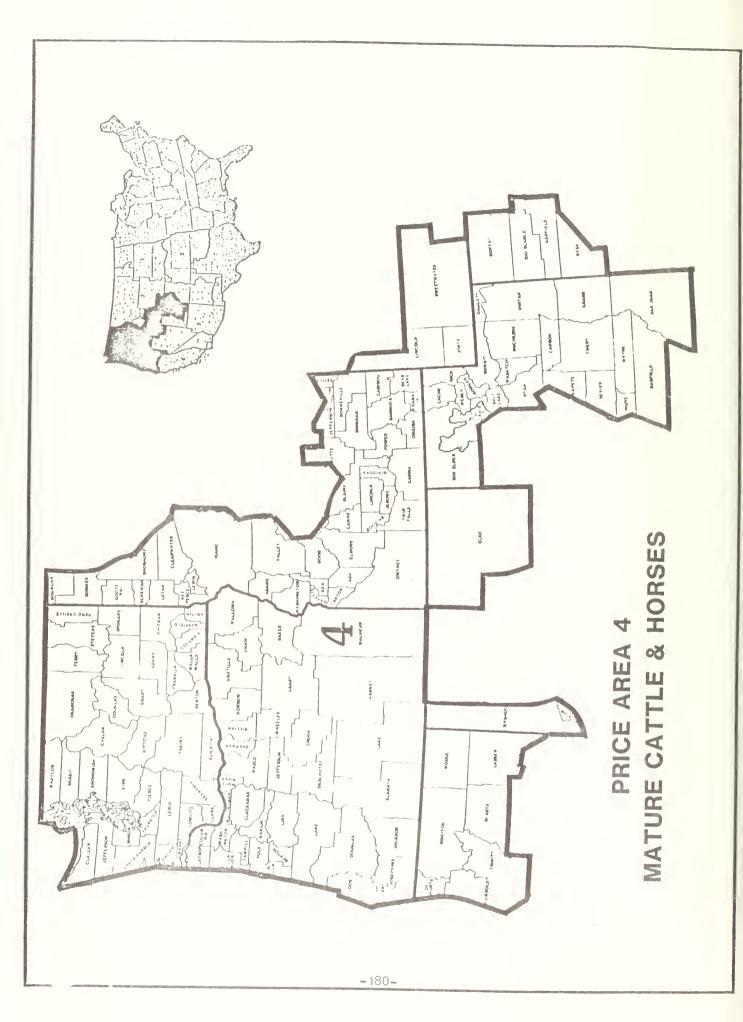
Table 6 shows the average prices paid for use on lands in federal ownership for the entire 7-year period to be \$6.77 per head or pair month for mature cattle and horses in this price area. The 4-year (80-83) average was \$ 7.13; 3-year (81-83), \$7.17; 2-year (82-83), \$7.16, and the 83 average was \$8.32.

The \$7.60 value of grazing on public lands, derived by adjusting the private lands lease rate of \$8.00 downward by five percent to reflect differences between the conditions on public rangelands, is 83 cents above the 7-year average and 47 cents above the 4-year averages for federal lands but 72 cents below the prices shown for 1983. Therefore, it is felt that that the adjustment is adequate to reflect any possible differences.

VALUATION

MATURE CATTLE AND HORSES

PRICE AREA 4



Price Area 4

Physical Description

Price Area 4 contains the seven northern-most counties of California, Oregon, all of the State of Washington; all of Idaho (except the four counties in its east-central part). Washoe and Elko Counties in Nevada. southwestern three counties of Wyoming; the four northwestern-most counties of Colorado; and all of Utah (except the six southern counties bordering on Nevada, and Kane County in the southern portion of the state). This pricing area is quite diverse in its composition as it includes all of the northwestern-most area of the United States with property types ranging from rain-forest in Washington to high desert in Nevada. The binding element of this pricing area is the grazing use pattern predominant throughout its area. Livestock grazing occurs in the transitional foothills between the lower agricultural valley bottoms and timbered mountainous areas. This pattern of utilization is what makes this diverse and populated area generally homogeneous for livestock production. Numerous of the marine, Mediterranean, and highland provinces are included in this pricing area. The climatic conditions are moderate to wet with generally moderate temperatures throughout the area. Grazing in Price Area 4 is typically during the spring, summer, and fall

Public Rangeland Data

The data regarding the public rangelands within Price Area 4 and the grazing use on these lands is summarized in Tables 1, 2, and 3 contained in the following three pages.

Table MC-4-1.

	ADMIN BY BLM	NF	NGL	TOTALS	% OF ALLPUB RGLNDS
GROSS ACRES	52,581,879	46,852,591	180,310	99,614,780	32.4%
ACRES IN ALLOTS	48,434,818	28,292,900	151,107	76,878,825	30.9%
# OF CATTLE ALLOTS	4,555	1,326	20	5,901	25.0%
# OF SHEEP ALLOTS	375	536	0	911	33.0%
# OF HORSE ALLOTS	48	48	1	97	29.0%
# OF MIXED ALLOTS	598	47	0	645	18.0%
TOTAL ALLOTMENTS	5,576	1,957	21	7,554	25.0%
# OF PERMITS	6,369	2,831	22	9,222	28.6%
# OF OPERATORS	6,324	2,885	70	9,279	28.0%
ACT CATT AUMs/AMs	3,389,104	1,293,861	39,438	4,722,403	26.5%
ACT SHEEP AUMs/AMs	708,781	921,617	0	1,630,398	33.2%
ACT HORSE AUMs/AMs	14,622	5,714	165	20,501	26.4%
ACT OTHER AUMS/AMS	0	5,428	0	5,428	11.09
TOTAL AUMS/AMS	4,112,507	2,226,620	39,603	6,378,730	27.9%
LARGEST PERMIT	76,952AUMs	21,600 AMs	2,454 AMs		
SMALLEST PERMIT	1 AUMs	1 AMs	18 AMs		
RGE OF SIZE (60%)	1-10000 AUMs	1-7924 AMs	58-1682 AMs		
BEST STK RATE	1 Ac/AUM	1 Ac/AUM	2 Ac/AUM		
WORST STK RATE	99 Ac/AUM	99 Ac/AUM	22 Ac/AUM		
60% RANGE STK RATE	1-48 Ac/AUM	1-63 Ac/AUM	2-11 Ac/AUM		
AVERAGE STK RATE	11.78 Ac/AUM	12.71 Ac/AUM	3.82 Ac/AUM	12.05 Ac/AUM	

Table MC-4-2.

Public Rangeland Tracts or Allotments

By Size and Administrative Category

SIZE CLASS	PUBLIC LANDS NAT	TRACTS OR . TL. FOREST NAT Number	L. GRASSLANDS		%
0-160	1,029	82		1,111	14.7%
161-640	1,270	109		1,379	18.3%
641-2,000	1,121	165	4	1,290	17.1%
2,001-10,000	1,247	785	13	2,045	27.1%
10,001-100,000	824	808	4	1,636	21.7%
100,001-500,000	78	6		84	1.1%
500,001-1,000,00	00 7	2		9	0.1%
Over 1,000,000					
TOTALS	5,576	1,957	21	7,554	

Table MC-4-3.

Number of Public Rangeland Operators

In Different Size Classes, By Administrative Category

SIZE CLASS	NUMBER	OF OPERATORS I	N SIZE CLASS		% OF
AUMs(BLM) AMs (FS)	BLM	NF	NGL	TOTALS	OPERATORS
0**	48	62	0	110	1.1%
1-100	2,549	721	21	3,291	33.4%
101-500	2,701	1,118	30	3,849	39.0%
501-1,000	615	434	0	1,049	10.6%
1,001-2,000	443	260	3	706	7.2%
2,001-3,000	192	146	0	338	3.4%
3,001-4,000	99	79	0	178	1.8%
4,001-5,000	52	64	0	116	1.2%
5,001-15,000	124	40	0	164	1.7%
15,001-25,000	10	12	16	38	. 4%
25,000 PLUS	16	0	134	16	. 2%
TOTALS	6,849	2,936	70	9,855***	100.0%

^{*} A permit may be issued to a single operator or to a grazing association with several member operators.

^{**} Operators having ephemeral permits and trailing permits.

^{***} Another counting of operators within the price area is given as 9,279.

The summaries contained in Tables 1, 2, and 3 show that the public rangelands within this price area consist of some 7,554 tracts or allotments ranging in size from less than 160 acres to between 500,000 and 1,000,000 acres. Thirty-three percent (2,490) of the tracts are 640 acres or less in size. Forty-three percent (3,335) of the tracts are between 641 and 10,000 acres in size. Twenty-three percent (1720) of the tracts are between 10,001 and 500,000 acres in size. The remaining nine tracts are between 500,000 and 1,000,000 acres in size.

The grazing use by individual permittees ranges from a low of 1 AUM to a high of 21,600 animal months. Thirty-four percent (3,401) of the operators have 100 AUMs/AMs or less of use, and approximately 57 percent (5,604) have between 101 and 2000 AUMs/AMs. Use by the remaining nine percent (850) ranges from 2001 AUMs/AMs to over 25,000 AUMs/AMs.

The stocking rates on these lands range from a high of 1 acre/AUM to a low of more than 99 acres/AUM. The overall average stocking rate for all of the public rangelands within this price area is approximately 12.05 acres/AUM.

Most of the tracts have public access and on-site sources of stock water. Access to other tracts is controlled by the adjoining landowners. Stock water for some of the tracts is provided by sources on adjoining lands, usually owned or controlled by the public rangeland permittees/lessees.

Table MC-4-4.

MATURE CATTLE AND HORSES SUBFILES: D, F-J - 70% TRANSACTIONS

ALL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977	363,314	\$ 4.98	\$ 4.82	\$ 5.00	95	\$ 8,00	\$ 3.08
1978	89,522	\$ 4.76	\$ 6.45	\$ 6.42	34	\$ 9.74	\$ 5.00
1979	225,219	\$ 7.06	\$ 5.85	\$ 5.33	72	\$10.00	\$ 4.00
1980	198,001	\$ 6.05	\$ 6.53	\$ 6.38	102	\$10.00	\$ 5.00
1981	403,989	\$ 6.65	\$ 6.29	\$ 6.00	156	\$ 9.53	\$ 5.25
1982	648,327	\$ 3.75	\$ 5.67	\$ 5.31	82	\$10.00	\$ 3.50
1983	2,220,497	\$ 6.39	\$ 6.49	\$ 6.30	485	\$10.00	\$ 5.00
7-YR*	4,032,628	\$ 6.04	\$ 6.23	\$ 6.00	1,028	\$10.00	\$ 4.85

NONFEDERAL OWNERSHIP

PR	ICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
19	77	160,365	\$ 5.00	\$ 4.74	\$ 5.00	83	\$ 8.00	\$ 3.00
19	78	20,570	\$ 6.78	\$ 6.59	\$ 6.85	29	\$10.00	\$ 5.00
19	79	54,105	\$ 5.48	\$ 5.98	\$ 5.37	57	\$10.00	\$ 4.05
198	30	79,143	\$ 5.98	\$ 6.36	\$ 6.13	76	\$10.00	\$ 5.00
198	81	223,935	\$ 6.33	\$ 6.23	\$ 5.94	129	\$ 9.43	\$ 5.25
198	32	265,732	\$ 4.68	\$ 5.81	\$ 5.38	67	\$10.00	\$ 3.77
198	33	731,584	\$ 5.97	\$ 6.31	\$ 6.07	389	\$10.00	\$ 4.93
7	YR*	1,513,595	\$ 5.82	\$ 6.12	\$ 6.00	832	\$10.00	\$ 4.76

FEDERAL OWNERSHIP

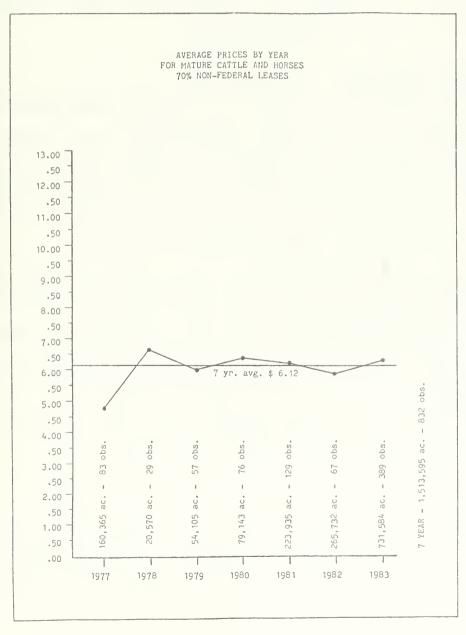
PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1077	200 100	h 1 00	4 5 25	+ = 0=	10	± 7.00	ф 2 O1
1977 1978	202,189 69,192	\$ 4.96 \$ 4.16	\$ 5.35 \$ 5.89	\$ 5.25 \$ 6.00	12 7	\$ 7.92 \$ 7.63	\$ 3.91 \$ 5.00
1979	169,094	\$ 7.33	\$ 5.32	\$ 5.22	15	\$ 8.33	\$ 3.97
1980	82,842	\$ 7.13	\$ 7.14	\$ 6.69	26	\$12.02	\$ 5.48
1981	170,922	\$ 6.65	\$ 6.60	\$ 6.50	27	\$10.25	\$ 5.00
1982	668,121	\$ 2.74	\$ 5.08	\$ 5.00	15	\$10.94	\$ 2.12
1983	1,000,913	\$ 8.02	\$ 7.21	\$ 7.28	96	\$11.11	\$ 5.91
7-YR*	2,292,466	\$ 6.54	\$ 6.68	\$ 6.50	196	\$10.94	\$ 5.00

^{* -} See Multi-Year Averages, Etc. description contained in Glossary of Terms.

Table MC-4-5.

SUMMARY OF MULTI-YEAR AVERAGES

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77-83 7 YR	\$ 6.12	1,513,595	832
78-83 6 YR	\$ 6.27	1,380,501	749
79-83 5 YR	\$ 6.26	1,343,571	720
80-83 4 YR	\$ 6.28	1,291,716	663
81-83 3 YR	\$ 6.27	1,207,795	585
82-83 2 YR	\$ 6.25	974,951	456
83 1 YR	\$ 6.31	731,584	389



Estimating the Private Land Lease Rate.

The prices paid for use by mature cattle and horses for the 1,188 transactions contained in the 100% file of nonfederal market transactions range from a low of \$0.11 to a high of \$65.00 per animal or pair month, with a median of \$6.00.

The prices paid for use for the 832 transactions (1977-1983) contained in the 70% file range from a low of \$3.00 (1977) to a high of \$10.00 (1978,79,82,83) per head or pair month. The average price for the total 7-year period, as shown by these transactions, was \$6.12 with a median price of \$6.00. The range of prices for the transactions considered in the 7-year average was from a low of \$4.76 and a high of \$10.00.

The averages for the 7-year period (77-83 - \$6.12), 6-year period (78-83 - \$6.27), 5-year period (79-83 - \$6.26), 4-year period (80-83 - \$6.28), 3-year period (81-83 - \$6.27), 2-year average price (82-83 - \$6.25), and the 1983 average price of \$6.31 show that the prices have remained relatively constant throughout the 7-year period covered by the transaction data.

Portions of this area have gone through a drought and a subsequent increase inb moisture over the past four or five years. The data does not show any direct relationship between changes in the availability of forage and price. As in the previous pricing areas, most weight is given to the 4-year average price, which would level out any possible highs and lows resulting from changes in availability, range conditions, and demand.

Placing the most weight on the 4-year average price of \$6.28, it is concluded that \$6.25 per head or pair month would represent a reasonable estimate of the private lands lease rate for this price area for mature cattle and horses.

Comparison with Public Rangelands

The private land lease rate was compared to the grazing use by mature cattle and horses on public rangelands for those factors which the market investigation indicates have a bearing on value or price. The effect of some of these factors was dealt with by selecting transaction data that involve only properties having the same or similar characteristics. These comparisons are summarized in the following chart. A zero indicates that a price adjustment between the private land lease rate and public rangeland grazing was not necessary because the factor was comparable for both land categories.

Comparison Chart

Time	Location	Size	Water		Conditions Of Use	-	Improvement Construction
0	0	0	0	0	-5%	0	0

The same narrative descriptions of the graphic comparisons or ratings given in Price Area 1 apply here.

The \$6.25 private land lease rate is adjusted downward by five percent. The result is \$5.93 ($\$6.25 \times .95$). The fair market value of grazing use by mature cattle and horses on public rangelands within Price Area 4 is estimated to be \$5.90 per head or pair month.

Table MC-4-6.

SUMMARY OF MULTI-YEAR AVERAGES

MATURE CATTLE 70% FEDERAL OWNERSHIP

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77–83 7 YR	\$ 6.68	2,292,466	196
78-83 6 YR	\$ 6.78	2,138,214	184
79–83 5 YR	\$ 6.82	2,078,802	179
80-83 4 YR	\$ 6.96	1,884,205	164
81-83 3 YR	\$ 6.93	1,780,928	138
82-83 2 YR	\$ 7.01	1,604,528	111
83 1 YR	\$ 7.21	1,000,913	96

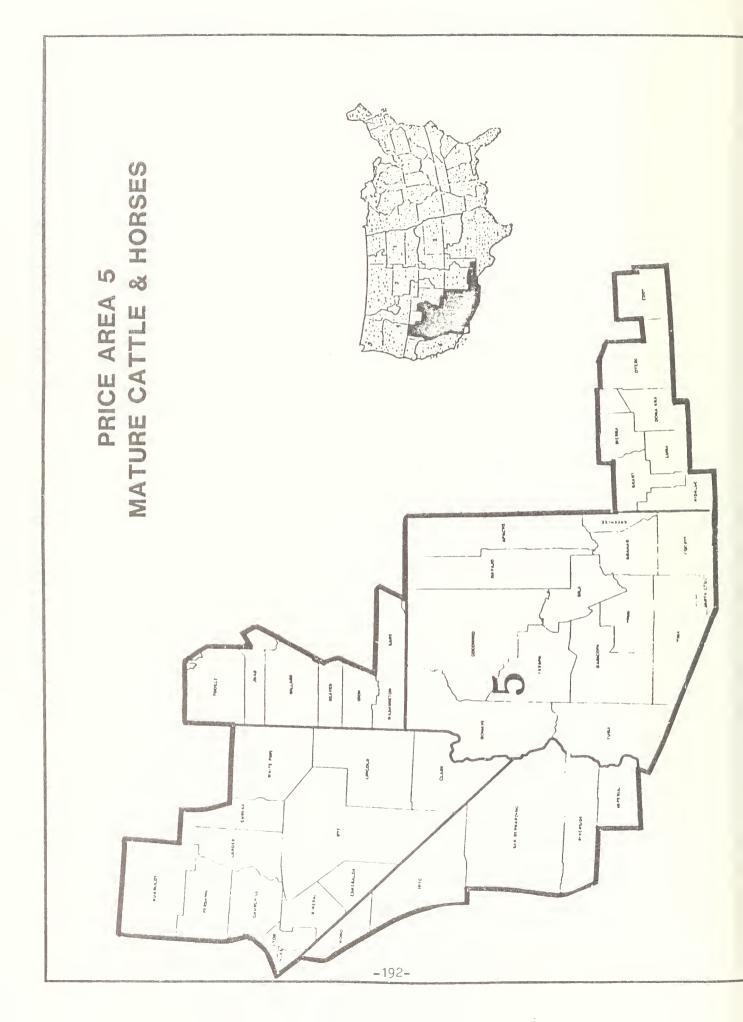
Table 6 shows the average prices paid for use on lands in federal ownership for the entire 7-year period to be \$6.68 per head or pair month for mature cattle and horses in this price area. The 4-year (80-83) average was \$ 6.96; 3 year (81-83), \$6.93; 2-year (82-83), \$7.01; and the 83 average was also \$7.21.

The \$5.90 value of grazing on public lands derived by adjusting the private lands lease rate of \$6.25 downward by five percent to reflect differences between the conditions on public rangelands is approximately 58 cents below the 7-year average for federal lands and \$1.04 lower than the prices shown for the past four years and more recent years. Therefore, it is felt that the adjustment is more than adequate to reflect any possible differences.

VALUATION

MATURE CATTLE AND HORSES

PRICE AREA 5



Price Area 5

Physical Description

Price Area 5 includes a portion of southern New Mexico; all of Arizona; all of Nevada (except Washoe and Elko Counties which are in pricing area 4); and the seven counties in southwestern Utah, including; Toolle, Juab, Millard, Beaver, Iran, Washington, and Kane Counties; and the five southeastern desert counties of California. This pricing area is comprised essentially of the high and low desert country of the west. Annual precipitation throughout this area is generally less than eight inches, with the majority of it in the form of summer thundershowers. The northern portions of the area get some periodic snow during the winter season. Temperatures range from below freezing in the winter to well above 120° F. in the summer. The carrying capacity of the native range in this area is among the worst in the United States, with more than 160 acres often required to support one cow for one month. Grazing in this area is generally during the spring, summer, and fall.

Public Rangeland Data

The data regarding the public rangelands within Price Area 5 and the grazing use on these lands is summarized in Tables 1, 2, and 3 contained in the following three pages.

Table MC-5-1.

	ADMIN BY BLM	NF	NGL	TOTALS	% OF ALLPUB RGLNDS
GROSS ACRES	80,724,590	26,462,967	0	107,187,557	34.9%
ACRES IN ALLOTS	69,001,959	22,842,408	0	91,844,367	36.9%
# OF CATTLE ALLOTS	2,394	1,165	0	3,559	15.1%
# OF SHEEP ALLOTS	261	353	0	614	22.3%
# OF HORSE ALLOTS	19	3	0	22	6.6%
# OF MIXED ALLOTS	591	22	0	613	17.1%
TOTAL ALLOIMENTS	3,265	1,543	0	4,808	15.9%
# OF PERMITS	3,468	2,257	0	5,725	17.7%
# OF OPERATORS	3,453	2,247	0	5,700	17.2%
ACT CATT AUMS/AMS	3,788,004	1,794,831	0	5,582,835	31.3%
ACT SHEEP AUMs/AMs	547,065	863,167	0	1,410,232	28.7%
ACT HORSE AUMS/AMS	16,732	706	0	17,438	22.4%
ACT OTHER AUMS/AMS	44	14,523	0	14,567	29.5
TOTAL AUMS/AMS	4,351,845	2,673,227	0	7,025,072	30.7%
LARGEST PERMIT	32,542AUMs	32,764 AMs	0 AMs		
SMALLEST PERMIT	l AUMs	3 AMs	0 AMs		
RGE OF SIZE (60%)	1-9262 AUMs	18-7200 AMs	0 AMs		
BEST STK RATE	1 Ac/AUM	1 Ac/AUM	0 Ac/AUM		
WORST STK RATE	99 Ac/AUM	99 Ac/AUM	0 Ac/AUM		
60% RANGE STK RATE	3-85 Ac/AUM	1-99 Ac/AUM	0 Ac/AUM		
AVERAGE STK RATE	15.86 Ac/AUM	8.54 Ac/AUM	0 Ac/AUM	13.07 Ac/AUM	

Table MC-5-2.

Public Rangeland Tracts or Allotments

By Size and Administrative Category

SIZE CLASS Acres	PUBLIC LANDS NATL		ALLOTMENTS IL. GRASSLANDS	TOTAL	%
0-160	229	20		249	5.2%
161-640	353	36		389	8.1%
641-2,000	500	114		614	12.8%
2,001-10,000	1,046	678		1,724	35.9%
10,001-100,000	992	679	000 =	1,671	34.8%
100,001-500,000	133	16		149	3.1%
500,001-1,000,00	00 10		gasp 6000	10	0.2%
Over 1,000,000		2	gang gang	2	
TOTALS	3,265	1,543		4,808	100%

Table MC-5-3.

Number of Public Rangeland Operators

In Different Size Classes, By Administrative Category

SIZE CLASS AUMs(BLM)	NUMBER	OF OPERATORS I	N SIZE CLAS	SES*	% OF
AMs (FS)	BLM	NF	NGL	TOTALS	OPERATORS
0**	295	32	0	327	5.7%
1-100	764	438	0	1,202	21.0%
101-500	1,041	817	0	1,858	32.5%
501-1,000	410	332	0	742	13.0%
1,001-2,000	442	274	0	286	5.0%
2,001-3,000	160	126	0	286	5.0%
3,001-4,000	126	85	0	211	3.7%
4,001-5,000	54	52	0	106	1.8%
5,001-15,000	143	89	0	232	4.1%
15,001-25,000	25	1	0	11	0.2%
25,000 PLUS	0	0	134	134	6.4%
TOTALS	3,466	2,251	0	5,717***	100%

^{*} A permit may be issued to a single operator or to a grazing association with several member operators.

^{**} Operators having ephemeral permits and trailing permits.

^{***} Another counting of operators within the price area is given as 5,700.

The summaries contained in Tables 1, 2, and 3 show that the public rangelands within this price area consist of some 4,808 tracts or allotments ranging in size from less than 160 acres to over 1,000,000 acres. Thirteen percent (638) of the tracts are 640 acres or less in size. Forty-nine percent (2,338) of the tracts are between 641 and 10,000 acres in size. Thirty-five percent (1671) of the tracts are between 10,000 and 100,000 acres. The remaining three percent (161) tracts are larger than 100,000 acres.

The grazing use by individual operators ranges from a low of 1 AUM to a high of 32,764 animal months. Twenty-seven percent (1529) of the operators have 100 AUMs/AMs or less of use, and approximately 50 percent (2,886) have between 101 and 2000 AUMs/AMs. Use by the remaining 17 percent (980) ranges from 2001 AUMs/AMs to over 25,000 AUMs/AMs.

The stocking rates on these lands range from a high of 1 acre/AUM to a low of more than 99 acres/AUM. The overall average stocking rate for all of the public rangelands within this price area is approximately 4.36 acres/AUM.

Most of the tracts have public access and on-site sources of stock water.

Access to other tracts is controlled by the adjoining landowners. Stock water

for some of the tracts is provided by sources on adjoining lands, usually

owned or controlled by the public rangeland permittees/lessees.

Table MC-5-4.

MATURE CATTLE AND HORSES SUBFILES: D, F-J - 70% TRANSACTIONS

ALL OWNERSHIP

PRICE DATI	E ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977	319,780	\$ 4.27	\$ 4.31	\$ 4.45	42	\$ 7.87	\$ 2.56
1978	204,566	\$ 5.40	\$ 5.58	\$ 6.00	11	\$ 7.50	\$ 5.00
1979		\$ 4.30	\$ 4.35	\$ 4.14	17	\$ 6.50	\$ 3.50
1980	581,089	\$ 5.58	\$ 4.89	\$ 5.00	35	\$ 8.46	\$ 2.91
1981	513,738	\$ 4.75	\$ 5.97	\$ 5.00	33	\$10.39	\$ 4.00
1982	240,860	\$ 4.09	\$ 4.28	\$ 4.86	21	\$ 5.83	\$ 3.29
1983	3,296,962	\$ 5.09	\$ 5.38	\$ 5.00	143	\$ 8.00	\$ 4.18
7-YR*	6,516,736	\$ 4.65	\$ 5.10	\$ 4.98	302	\$ 8.18	\$ 3.86

NONFEDERAL OWNERSHIP

PRICE DATE	E ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977	254,567	\$ 4.16	\$ 4.24	\$ 4.42	35	\$ 7.87	\$ 2.54
1978	6,453	\$ 6.14	\$ 6.23	\$ 6.25	8	\$ 8.18	\$ 6.00
1979	751,320	\$ 4.53	\$ 4.35	\$ 4.63	10	\$ 6.50	\$ 2.95
1980	534,647	\$ 5.20	\$ 4.37	\$ 3.75	30	\$ 8.46	\$ 2.62
1981	84,234	\$ 6.95	\$ 7.30	\$ 6.06	21	\$12.00	\$ 5.00
1982	99,620	\$ 4.25	\$ 4.65	\$ 5.00	13	\$ 5.33	\$ 4.17
1983	619,618	\$ 5.40	\$ 5.55	\$ 5.00	91	\$ 9.85	\$ 4.22
7-YR*	2,427,010	\$ 4.90	\$ 5.20	\$ 5.00	210	\$ 9.00	\$ 3.76

FEDERAL OWNERSHIP .

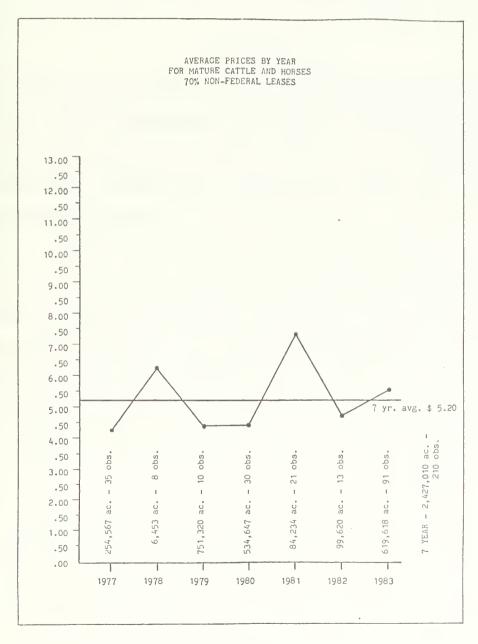
PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977	65,133	\$ 4.72	\$ 4.62	\$ 4.49	7	\$ 6.50	\$ 3.43
1978 1979	64,380 329,317	\$ 4.54 \$ 3.79	\$ 4.48 \$ 4.19	\$ 4.44 \$ 4.00	3 7	\$ 5.00 \$ 5.70	\$ 4.44 \$ 3.55
1980	188,088	\$ 7.83	\$ 6.88	\$ 7.00	7	\$ 9.29	\$ 5.56
1981 1982	275,397 171,128	\$ 4.24 \$ 3.55	\$ 4.28 \$ 3.21	\$ 4.06 \$ 3.05	12 6	\$ 6.94 \$ 4.89	\$ 2.91
1983	2,601,017	\$ 4.98	\$ 5.20	\$ 5.08	52	\$ 7.21	\$ 4.17
7-YR*	3,738,871	\$ 4.82	\$ 4.94	\$ 4.77	92	\$ 7.21	\$ 4.00

^{* -} See Multi-Year Averages, Etc. description contained in Glossary of Terms.

Table MC-5-5.

SUMMARY OF MULTI-YEAR AVERAGES

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77–83 7 YR	\$ 5.20	2,427,010	210
78-83 6 YR	\$ 5.40	2,164,101	175
79–83 5 YR	\$ 5.37	2,156,449	165
80-83 4 YR	\$ 5.46	1,385,479	157
81-83 3 YR	\$ 5.69	798,431	127
82-83 2 YR	\$ 5.39	706,171	104
83 1 YR	\$ 5.55	619,618	91



Estimating the Private Land Lease Rate.

The prices paid for use by mature cattle and horses for the 300 transactions contained in the 100% file of nonfederal market transactions range from a low of \$0.57 to a high of \$48.75 per animal or pair month, with a median of \$5.00.

The prices paid for use for the 210 transactions (1977-1983) contained in the 70% file range from a low of \$2.54 (1977) to a high of \$12.00 (1981) per head or pair month. The average price for the total 7-year period, as shown by these transactions, was \$5.20 with a median price of \$5.00. The range of prices for the transactions considered in the 7-year average was from a low of \$3.76 and a high of \$9.00.

The averages for the 7-year period (77-83 - \$5.20), 6-year period (78-83 - \$5.40), 5-year period (79-83 - \$5.37), 4-year period (80-83 - \$5.46) and 3-year period (81-83 - \$5.69) indicate a modest increase in prices from 1977 through 1981. The 2-year average (82-83 - \$5.39) shows a slight drop in 82 compared to 81 prices. The 1983 prices show a rise to slightly above the level of the average prices paid over the 4-year period (80-83).

Portions of this area have gone through a drought and a subsequent increase in moisture over the past four or five years. Although the data does not show any direct relationship between change in availability of forage and price, it is felt that the prices shown by the 4-year average (80-83 - \$5.46) tend to level out possible highs and lows resulting from availability, range conditions, and demand.

Placing the most weight on the 4-year average price of \$5.46, tempered by the the 1983 price of \$5.55, it is concluded that \$5.50 per head or pair month would represent a reasonable estimate of the private lands lease rate for this price area for mature cattle and horses.

Comparison with Public Rangelands

The private land lease rate was compared to the grazing use by mature cattle and horses on public rangelands for those factors which the market investigation indicates have a bearing on value or price. The effect of some of these factors was dealt with by selecting transaction data that involve only properties having the same or similar characteristics. These comparisons are summarized in the following chart. A zero indicates that a price adjustment between the private land lease rate and public rangeland grazing was not necessary because the factor was comparable for both land categories.

Comparison Chart

				Anim	Conditions	Improvement	Improvement
Time	Location	Size	Water				Construction
0	0	0	0	0	5%	0	0

The same narrative descriptions of the graphic comparisons or ratings given in Price Area 1 apply here.

The \$5.50 private land lease rate is adjusted downward by five percent. The result is \$5.23 (\$6.25 x .95). The fair market value of grazing use by mature cattle and horses on public rangelands within Price Area 5 is estimated to be \$5.20 per head or pair month.

Table MC-5-6.

SUMMARY OF MULTI-YEAR AVERAGES

MATURE CATTLE 70% FEDERAL OWNERSHIP

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77-83 7 YR	\$ 4.94	3,738,871	92
78-83 6 YR	\$ 4.97	3,705,738	87
79-83 5 YR	\$ 5.00	3,507,210	82
80-83 4 YR	\$ 5.07	3,229,743	77
81-83 3 YR	\$ 4.91	3,099,497	70
82-83 2 YR	\$ 5.04	2,861,858	58
83 1 YR	\$ 5.20	2,601,017	52

Table 6 shows the average prices paid for use on all lands in federal ownership within this price area for the entire 7-year period to be \$4.94 per head or pair month for mature cattle and horses. The 4-year (80-83) average was \$5.07; 3-year (81-83), \$4.91; 2-year (82-83), \$5.04; and the 83 average was \$5.20.

This price area includes one of the two situations on public rangelands in which the fees for grazing use are arrived at through a competitive bidding process. The weighted average prices (based on AUM's) paid for the 1982-1983 and 1983-1984 seasons is \$5.52 per AUM, which is \$0.02 higher than the estimated private land lease rate for the area.

The competitive leases on the McGregor Range do not have a base property requirement. The grazing units are also developed to a slightly higher degree than the majority of allotments on the public rangelands. This situation tends to support the estimate of value for the public rangelands derived by adjusting the private land lease rate.

The \$5.20 value of grazing on public lands derived by adjusting the private lands lease rate of \$5.50 downward by five percent to reflect differences between the conditions on public rangelands is 26 cents above the 7-year and 13 cents above the 4-year averages for the federal lands, but it is the same as the average price shown by the 1983 transactions. It is felt that that the adjustment is adequate to reflect any possible differences.

VALUATION

MATURE CATTLE AND HORSES

PRICE AREA 6



PRICE AREA 6 MATURE CATTLE & HORSES

Price Area 6

Physical Description

Price Area 6 is comprised of the Sacramento and San Joaquin Valleys and coastal area of California south of the timbered northerly portion of the state that is associated with Price Area 4. The eastern boundary of this pricing area approximates the east slope of the Sierra Nevada Mountains extending south to include Kern, Santa Barbara, Ventura, Los Angeles, Orange and San Diego Counties in the southwest portion of California. It includes several provinces of the Mediterranean Division ecoregion.

The climate conditions within this pricing area are generally quite mild year-round. Grazing generally occurs in the foothills above the highly productive valley bottoms. Although grazing could occur in most areas on a year-round basis, it generally occurs from December through September in the eastern foothill areas, with February through May the season of use in the western foothills and coastal areas of Price Area 6. This is due to the severe drying that occurs in the September through November period and resultant fire hazard, as well as a general drop in the productivity of the native range in the fall of the year.

Public Rangeland Data

The data regarding the public rangelands within Price Area 1 and the grazing use on these lands is summarized in Tables 1, 2, and 3 contained in the following three pages.

Table MC-6-1.

	ADMIN BY BLM	NF	NGL	TOTALS	% OF ALLPUB RGLNDS
GROSS ACRES	2,342,588	10,121,960	0	12,464,548	4.0%
ACRES IN ALLOTS	1,465,089	5, 639, 369	0	7,104,458	2.9%
# OF CATTLE ALLOTS	403	427	0	830	3.5%
# OF SHEEP ALLOTS	28	38	0	66	2.4%
# OF HORSE ALLOTS	8	4	0	12	3.6%
# OF MIXED ALLOTS	17	12	0	29	.008%
TOTAL ALLOTMENTS	456	481	0	937	3.1%
# OF PERMITS	442	391	0	833	2.6%
# OF OPERATORS	460	401	0	861	2.6%
ACT CATT AUMs/AMs	94,686	189,370	0	284,056	1.6%
ACT SHEEP AUMS/AMS	21,809	23,233	0	45,042	.009%
ACT HORSE AUMS/AMS	290	359	0	649	.008%
ACT OTHER AUMS/AMS	28	1,658	0	1,686	3.4%
TOTAL AUMs/AMs	116,813	214,620	0	331,433	1.4%
LARGEST PERMIT	8,400 AUMs	5,700 AMs	0 AMs		
SMALLEST PERMIT	1 AUMs	5 AMs	0 AMs		
RGE OF SIZE (60%)	1-1600 AUMs	12-1528 AMs	0 AMs		<u></u>
BEST STK RATE	1 Ac/AUM	1 Ac/AUM	0 Ac/AUM		
WORST STK RATE	99 Ac/AUM	99 Ac/AUM	0 Ac/AUM		
60% RANGE STK RATE	1-11 Ac/AUM	1-42 Ac/AUM	0 Ac/AUM		
AVERAGE STK RATE	12.54 Ac/AUM	26.28 Ac/AUM	0 Ac/AUM	21.44 Ac/AUM	

Table MC-6-2.

Public Rangeland Tracts or Allotments

By Size and Administrative Category

SIZE CLASS	PUBLIC LANDS NATL	. FOREST NA	R ALLOTMENTS TL. GRASSLANDS		%
0-160	100	15	400	115	12.3%
161-640	127	22		149	15.9%
641-2,000	120	55	44-	175	18.7%
2,001-10,000	93	171		264	28.2%
10,001-100,000	13	217		230	24.5%
100,001-500,000	3	1		4	0.4%
500,001-1,000,0	00				
Over 1,000,000					
TOTALS	456	481		937	

Table MC-6-3.

Number of Public Rangeland Operators

In Different Size Classes, By Administrative Category

SIZE CLASS AUMs(BLM)	NUMBER	OF OPERATORS IN	SIZE CLAS	SES*	% OF
AMs (FS)	BLM	NF	NGL	TOTALS	OPERATORS
0**	21	5	0	26	2.8%
1-100	289	91	0	380	42.3%
101-500	125	194	0	319	35.5%
501-1,000	17	80	0	97	10.8%
1,001-2,000	14	38	0	52	5.8%
2,001-3,000	3	8	0	11	1.2%
3,001-4,000	0	5	0	5	0.6%
4,001-5,000	1	4		4	0.6%
5,001-15,000	3	1	0	4	. 48
15,001-25,000	0	0	0	0	0.0%
25,000 PLUS	0	0	0	0	0.0%
TOTALS	473	426	0	899***	100.0%

^{*} A permit may be issued to a single operator or to a grazing association with several member operators.

^{**} Operators having ephemeral permits and trailing permits.

^{***} Another counting of operators within the price area is given as 861.

The summaries contained in Tables 1, 2, and 3 show that the public rangelands within this price area consist of some 937 tracts or allotments ranging in size from less than 160 acres to between 100,000 and 500,000 acres. Twenty-eight percent (264) of the tracts are 640 acres or less in size, forty-seven percent (439) are between 641 and 10,000 acres in size, and the remaining 25 percent (234) are larger than 10,000 acres.

The grazing use by individual operators ranges from a low of 1 AUM to a high of 8,400 AUMs. Forty-five percent (406) of the operators have 100 AUMs/AMs or less of use, and approximately 52 percent (468) operators have between 101 and 2000 AUMs/AMs. Use by the remaining three percent (24) ranges from 2,001 AUMs/AMs to over 5,001 AUMs/AMs.

The stocking rates on these lands range from a high of 1 acre/AUM to a low of more than 99 acres/AUM. The overall average stocking rate for all of the public rangelands within this price area is approximately 21.44 acres/AUM.

Most of the tracts have public access and on-site sources of stock water. Access to other tracts is controlled by the adjoining landowners. Stock water for some of the tracts is provided by sources on adjoining lands, usually owned or controlled by the public rangeland permittees/lessees.

Table MC-6-4.

MATURE CATTLE AND HORSES SUBFILES: D, F-J - 70% TRANSACTIONS

ALL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
			1			1 0 00	1 0 10
1977	174,295	\$ 5.68	\$ 5.22	\$ 4.94	138	\$ 9.00	\$ 3.40
1978	74,255	\$ 5.80	\$ 5.82	\$ 5.48	26	\$ 8.05	\$ 5.00
1979	77,146	\$ 6.91	\$ 7.32	\$ 7.15	42	\$12.60	\$ 5.00
1980	150,023	\$ 5.51	\$ 6.25	\$ 6.09	62	\$ 9.53	\$ 4.63
1981	193,281	\$ 8.23	\$ 6.99	\$ 7.20	49	\$10.12	\$ 5.15
1982	45,618	\$ 4.53	\$ 6.22	\$ 5.42	24	\$10.80	\$ 5.00
1983	275,868	\$ 8.09	\$ 7.03	\$ 6.60	118	\$11.60	\$ 5.00
7-YR*	958,306	\$ 6.29	\$ 6.26	\$ 6.00	463	\$10.50	\$ 4.50

NONFEDERAL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977 1978	174,990 73,655	\$ 5.67 \$ 5.81	\$ 5.22 \$ 5.83	\$ 4.94 \$ 5.56	138 25	\$ 9.00 \$ 8.05	\$ 3.32 \$ 5.00
1979	77,166	\$ 6.99	\$ 7.69	\$ 7.48	40	\$12.80	\$ 5.33
1980 1981	135,078 107,718	\$ 5.61 \$ 7.36	\$ 6.29 \$ 6.92	\$ 6.55 \$ 7.11	57 46	\$ 9.38 \$10.12	\$ 4.60 \$ 5.00
1982 1983	45,226 285,160	\$ 4.55 \$ 7.64	\$ 6.55 \$ 7.05	\$ 5.59 \$ 6.67	22 108	\$10.80 \$11.60	\$ 5.00 \$ 5.00
7-YR*	839,633	\$ 5.97	\$ 6.28	\$ 6.00	436	\$10,45	\$ 4,50

FEDERAL OWNERSHIP

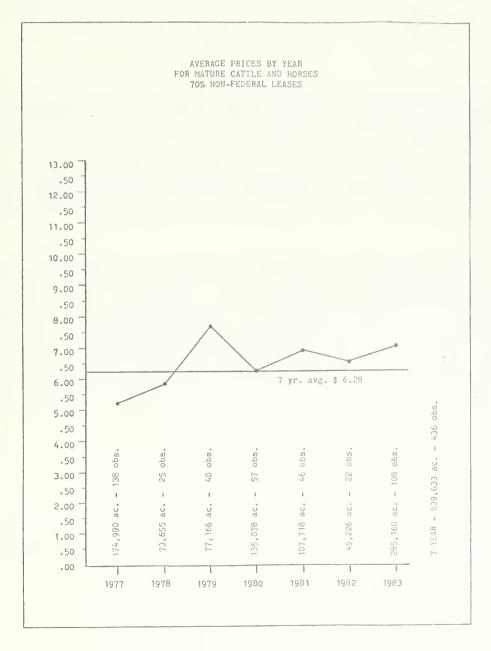
PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1077	225	h c 02	A	A	2	h (01	d 1 10
1977 1978	325 600	\$ 6.03 \$ 5.39	\$ 5.55 \$ 5.39	\$ 5.55 \$ 5.39	2	\$ 6.91 \$ 5.39	\$ 4.19 \$ 5.39
1979	1,140	\$ 2.59	\$ 3.17	\$ 3.17	2	\$ 4.10	\$ 4.10
1980	22,802	\$ 9.51	\$ 6.77	\$ 5.50	7	\$14.04	\$ 2.84
1981	87,301	\$ 9.22	\$ 7.47	\$ 7.58	3	\$ 9.38	\$ 7.58
1982	252	\$ 0.90	\$ 1.67	\$ 1.67	2	\$ 2.70	\$ 0.64
1983	23,668	\$ 8.69	\$ 6.89	\$ 5.75	12	\$13.00	\$ 5.50
7-YR* AL	121,573	\$ 8.67	\$ 6.02	\$ 5.50	27	\$12.14	\$ 5.00

^{* -} See Multi-Year Averages, Etc. description contained in Glossary of Terms.

Table MC-6-5.

SUMMARY OF MULTI-YEAR AVERAGES

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77-83 7 YR	\$ 6.28	839,633	436
78-83 6 YR	\$ 6.77	685,211	298
79–83 5 YR	\$ 6.88	633,039	273
80-83 4 YR	\$ 6.77	558,775	233
81-83 3 YR	\$ 6.95	419,003	176
82-83 2 YR	\$ 6.96	306,612	130
83 1 YR	\$ 7.05	285, 993	108



Estimating the Private Land Lease Rate.

The prices paid for use by mature cattle and horses for the 622 transactions contained in the 100% file of nonfederal market transactions range from a low of \$0.21 to a high of \$32.53 per animal or pair month, with a median of \$6.00.

The prices paid for use for the 436 transactions (1977-1983) contained in the 70% file range from a low of \$3.32 (1977) to a high of \$12.80 (1979) per head or pair month. The average price for the total 7-year period, as shown by these transactions, was \$6.28 with a median price of \$6.00. The range of prices for the transactions considered in the 7-year average was from a low of \$4.50 and a high of \$10.45.

The averages for the 7-year period (77-83 - \$6.28), 6-year period (78-83 - \$6.77), 5-year period (79-83 - \$6.88), 4-year period (80-83 - \$6.77), 3-year period (81-83 - \$6.95), 2-year period (82-83 - \$6.96), and 1983 show a moderate but reasonably steady increase in prices from 1977 through 1983.

Portions of this area have gone through a drought and a subsequent increase in moisture over the past four or five years. Although the data does not show any direct relationship between changes in availability of forage to price, it is felt that the prices shown by the 4-year average (80-83 - \$6.77) tend to level out any possible highs and lows resulting from short-term changes in availability, range conditions, and demand.

Placing the most weight on the 4-year average price of \$6.77, it is concluded that \$6.75 per head or pair month would represent a reasonable estimate of the private lands lease rate for this price area for mature cattle and horses.

Comparison with Public Rangelands

The private land lease rate was compared to the grazing use by mature cattle and horses on public rangelands for those factors which the market investigation indicates have a bearing on value or price. The effect of some of these factors was dealt with by selecting transaction data that involve only properties having the same or similar characteristics. These comparisons are summarized in the following chart. A zero indicates that a price adjustment between the private land lease rate and public rangeland grazing was not necessary because the factor was comparable for both land categories.

Comparison Chart

				Anim	Conditions	Improvement	Improvement
Time	Location	Size	Water	Type		Maintenance	Construction
0	0	0	O	0	-5%	0	0

The same narrative descriptions of the graphic comparisons or ratings given in Price Area 1 apply here.

The \$6.75 private land lease rate is adjusted downward by five percent. The result is \$6.41 ($$6.75 \times .95$). The fair market value of grazing use by mature cattle and horses on public rangelands within Price Area 6 is estimated to be \$6.40 per head or pair month.

Table MC-6-6

SUMMARY OF MULTI-YEAR AVERAGES

MATURE CATTLE AND HORSES 70% FEDERAL OWNERSHIP

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77-83 7 YR	\$ 6.02	121,573	27
78-83 6 YR	\$ 6.06	121,248	25
79-83 5 YR	\$ 6.22	125,030	26
80-83 4 YR	\$ 6.69	124,518	22
81-83 3 YR	\$ 6.79	111,265	17
82-83 2 YR	\$ 6.22	19,502	12
83 1 YR	\$ 6.89	23,668	12

Table 6 shows the average prices paid for use on lands in federal ownership for the entire 7-year period to be \$6.02 per head or pair month for mature cattle and horses in this price area. The 4-year (80-83) average was \$6.69, 3-year (81-83) - \$6.79, 2-year (82-83) - \$6.22, and the 83 average was \$6.89.

The \$6.40 value of grazing on public lands, derived by adjusting the private lands lease rate of \$6.75 downward by five percent to reflect differences between the conditions on public rangelands, is 38 cents above the 7-year average prices, 29 cents below the 4-year, 39 cents below the 3-year and 49 cents below the 1983 price. Placing most weight on the 4-year averages of \$6.69 indicates that the adjustment is more than adequate to reflect any possible differences.

VALUATION BY PRICE AREA FOR YEARLINGS

General

The data describing the public rangelands and the grazing use on the public rangelands within each price area are summarized in the preceding section on mature cattle and horses. It will not be repeated in valuations for yearlings.

As for mature cattle and horses, the transaction data involving yearling cattle within each price area were analyzed and processed to provide indications of the value of grazing (i.e., the private grazing land lease rate) for yearlings for the price area. The methods used to process the data were described in the section entitled, "General Description of Transaction Data Analysis." The private grazing land lease rates are further analyzed to derive a final estimate of rental value for grazing yearlings for each price area. Public rangeland grazing use is then compared to the private land lease rate to develop estimates of value for grazing yearlings on the public rangelands.

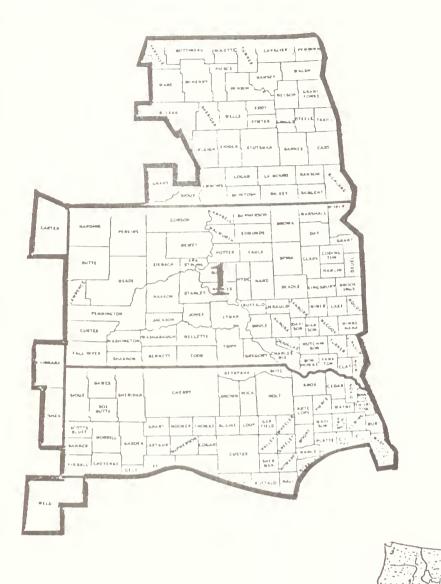
These analyses are based on average prices for different segments of the 7-year period covered by the transaction data. A chart contained in the valuation section each for price area displays the average prices for the entire 7-year period; average for the 6-year period covering 1978 through 1983; 5-year period, 1979 - 1983; 4-year period, 1980-1983; 3-year period, 1981-1983; 2-year period, 1982-1983; and the average price for the most recent year, 1983.

The estimates of the private land lease rate for each price area are based on analyses of transactions involving nonfederal lands. The estimates of fair market rental value of grazing on public rangelands are then derived by adjusting the private land lease rates to reflect differences between the use on nonfederal lands compared to those on the public rangelands. The transaction data for leases involving federal lands are used as a check against the final estimates of value of grazing use on the public rangelands derived by adjusting the estimate of private land lease rate.

VALUATION

YEARLING CATTLE

PRICE AREA 1



PRICE AREA 1 YEARLING CATTLE

Price Area 1

Transaction Data Summaries

Table Y-l-1.

YEARLINGS SUBFILES: D, F-J - 70% TRANSACTIONS

ALL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977	9,740	\$ 5.13	\$ 4.59	\$ 3.60	6	\$ 9.00	\$ 3.20
1978	6,200	\$ 7.80	\$ 7.13	\$ 7.13	2	\$ 8.00	\$ 6.25
1979	60,520	\$ 7.58	\$ 7.42	\$ 8.00	19	\$10.00	\$ 5.33
1980	16,877	\$11.11	\$10.47	\$10.00	11	\$14.29	\$ 9.00
1981	34,502	\$ 8.16	\$ 8.26	\$ 8.00	16	\$10.00	\$ 8.00
1982	160	\$ 2.00	\$ 2.00	\$ 2.00	1	\$ 2.00	\$ 2.00
1983	48,546	\$ 7.45	\$ 7.70	\$ 8.00	21	\$ 9.00	\$ 7.20
7-YR*	181,498	\$ 7.77	\$ 8.01	\$ 8.00	76	\$10.00	\$ 7.00

NONFEDERAL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1077	6 500	± 7 04	+ = 06	± 4.00	-		1 2 00
1977 1978	6,500 6,200	\$ 7.24 \$ 7.80	\$ 5.36 \$ 7.13	\$ 4.00 \$ 7.13	2	\$10.67 \$ 8.00	\$ 1.82 \$ 6.25
1979	50,860	\$ 7.54	\$ 7.20	\$ 8.00	15	\$10.00	\$ 5.00
1980	16,877	\$11.11	\$10.47	\$10.00	11	\$14.29	\$ 9.00
1981	34,502	\$ 8.16	\$ 8.26	\$ 8.00	16	\$10.00	\$ 8.00
1982	160	\$ 2.00	\$ 2.00	\$ 2.00	1	\$ 2.00	\$ 2.00
1983	48,546	\$ 7.45	\$ 7.70	\$ 8.00	21	\$ 9.00	\$ 7.20
7-YR*	168,838	\$ 7.82	\$ 8.04	\$ 8.00	71	\$10.00	\$ 7.00

FEDERAL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977 1979	4,000 9,660	\$ 2.50 \$ 7.82	\$ 2.50 \$ 8.25	\$ 2.50 \$ 8.25	1 4	\$ 2.50 \$10.00	\$ 2.50 \$ 7.50
7-YR*	13,660	\$ 6.26	\$ 7.10	\$ 7.50	5	\$10.00	\$ 6.50

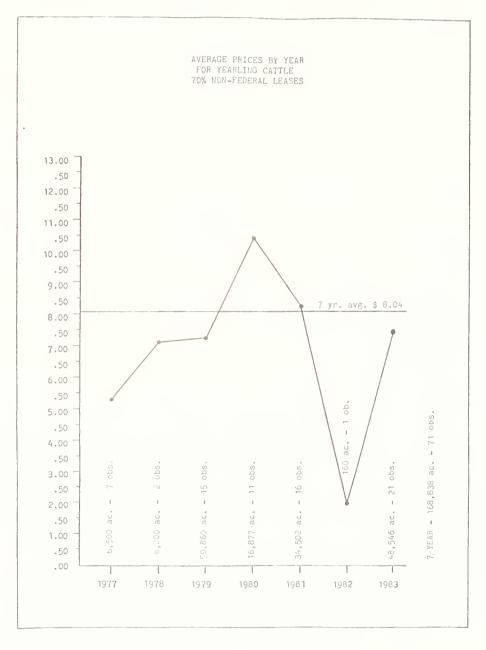
^{*} See Multi-Year Averages, Etc., Description in Glossary of Terms.

Table Y-1-2.

SUMMARY OF MULTI-YEAR AVERAGES

YEARLINGS 70% NONFEDERAL OWNERSHIP

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77-83 7 YR	\$ 8.04	168,838	71
78-83 6 YR	\$ 8.18	143,818	64
79-83 5 YR	\$ 8.22	137,618	62
80-83 4 YR	\$ 8.34	98,748	49
81-83 3 YR	\$ 7.92	78,558	38
82-83 2 YR	\$ 7.63	46,146	20
83 1 YR	\$ 7.70	48,546	21



Estimating the Private Land Lease Rate.

The prices paid for use by mature cattle and horses for the 101 transactions contained in the 100% file of nonfederal market transactions range from a low of \$0.09 to a high of \$24.16 per head month, with a median of \$8.00.

The prices paid for use for the 71 transactions (1977-1983) contained in the 70% file range from a low of \$1.82 (1977) to a high of \$14.29 (1980) per head month. The average price for the total 7-year period, as shown by these transactions, was \$ 8.04 with a median price of \$8.00. The range of prices for the transactions considered in the 7-year average was from a low of \$7.00 and a high of \$10.00.

The averages for the 6-year period (78-83 - \$8.18), 5-year period (79-83 - \$8.22), and the 4-year period (80-83 - \$8.34) indicate a slow but steady increase in prices from 1977 through 1980. The 3-year (81-83 - \$7.92) and 2-year (82-83 - \$7.63) averages and the 1983 price show that prices have gone down from that shown by the 4-year average and remained fairly stable for two of the past three years.

Portions of this area have gone through a drought and subsequent increase in moisture over the past four or five years. Although the data does not show any direct relationship between availability of forage and price, it is felt that picking a price below those shown by the 4-year average (80-83) and the averages shown by the past three years should level out any possible highs and lows resulting from changes in availability, range conditions, and demand.

Placing more weight on the averages of the past three years, it is concluded that \$7.50 per head month would represent a reasonable estimate of the private land lease rate for yearling cattle in this pricing area.

Comparison with Public Rangelands

The private land lease rate was compared to the grazing use by yearling cattle on public rangelands for those factors which the market investigation indicates have a bearing on value or price. The effect of some of these factors was dealt with by selecting transaction data that involve only properties having the same or similar characteristics. These comparisons are summarized in the following chart. A zero indicates that a price adjustment between the private land lease rate and public rangeland grazing was not necessary because the factor was comparable for both land categories.

Comparison Chart

Time	Location	Size	Water		Conditions Of Use	Improvement Maintenance	Improvement Construction
0	0	0	0	Ο	-5%	0	0

Time - The private land lease rate was estimated as of the date of this appraisal.

Location - The private land lease rate was based on transactions within the same price area as the public rangelands to which the rate applies.

Size - The public rangelands are an aggregation of tracts or allotments that are in the same general size range as the properties involved by the transactions in the price area.

Animal Type - The transactions considered in arriving at the private land lease rate for yearling cattle were limited to those involving yearling cattle.

Conditions—

of Use

The conditions of use on public lands as compared to those found on the private lands was analyzed in the section entitled, "Comparison of Private Leases to Public Permit," in an earlier section of this report. This analysis indicated the need to make a downward adjustment of five percent to reflect the differences in conditions of use.

Improvement - The comparison is based on the condition that the landowner in Maintenance the private sector and for the public rangelands provides the materials and the lessee or permittee/lessee performs the work.

Improvement - The comparison is based on the condition that the landowner Construction does all range improvement construction.

The \$7.50 private land lease rate is adjusted downward by five percent. The result is \$7.13 ($$7.50 \times .95$). The fair market value of grazing use by yearling cattle on public rangelands within Price Area 1 is estimated to be \$7.10 per head month.

Comparison of Adjusted Price to Prices Involving Federal Lands

Table 3

SUMMARY OF MULTI-YEAR AVERAGES

YEARLINGS 70% FEDERAL OWNERSHIP

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77-83 7 YR	\$ 7.10	13,660	5
78-83 6 YR	\$ 8.25	9,660	4
79–83 5 YR	\$ 8.25	9,660	4
80-83 4 YR	NO	DATA	
81-83 3 YR	NO	DATA	
82-83 2 YR	NO	DATA	
83 1 YR	NO	DATA	

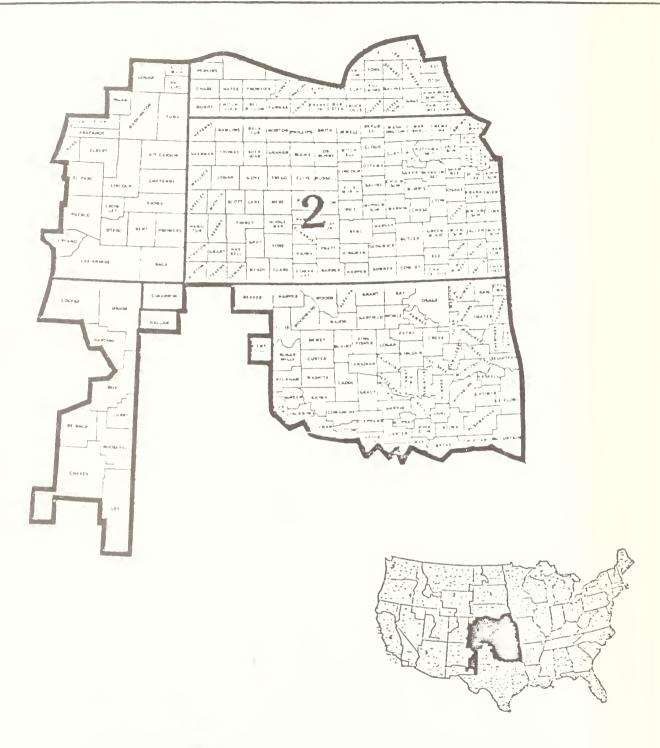
Table 3 shows that there was an extremely limited amount of yearling transaction data involving federal lands. The average prices paid for use on lands in federal ownership for the entire 7-year period was \$7.10 per head month. The 5-year (79-83) average was \$8.25. There were no transactions in 1983.

The \$7.10 value of grazing yearling cattle on public lands, derived by adjusting the private lands lease rate of \$7.50 downward by five percent to reflect differences between the conditions on public rangelands, is the same as the 7-year average for federal lands, based on the limited amount of data available. Therefore, it is felt that the adjustment is adequate to reflect any possible differences.

VALUATION

YEARLING CATTLE

PRICE AREA 2



PRICE AREA 2 YEARLING CATTLE

Transaction Data Summaries

Table Y-2-1.

YEARLINGS SUBFILES: D, F-J - 70% TRANSACTIONS

ALL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
		4 = 00		4 5 00	- 4	1	1 4 5 5
1977	95,689	\$ 5.20	\$ 5.85	\$ 6.00	24	\$ 8.33	\$ 4.17
1978	8,317	\$ 7.15	\$ 5.81	\$ 6.00	7	\$ 8.00	\$ 6.00
1979	109,583	\$ 7.69	\$ 6.73	\$ 6.94	26	\$10.00	\$ 5.04
1980	123,304	\$ 4.52	\$ 5.40	\$ 5.83	31	\$ 8.42	\$ 3.25
1981	61,438	\$ 5.94	\$ 5.75	\$ 6.05	30	\$ 9.00	\$ 3.36
1982	21,960	\$ 8.46	\$ 8.35	\$ 8.69	5	\$10.14	\$ 8.17
1983	370,960	\$ 7.29	\$ 7.05	\$ 7.00	77	\$ 9.17	\$ 6.00
7-YR*	871,626	\$ 6.35	\$ 6.47	\$ 6.63	202	\$ 9.17	\$ 5.00

NONFEDERAL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
			-				
1977	95,159	\$ 5.19	\$ 5.85	\$ 6.00	23	\$ 8.33	\$ 4.17
1978	8,317	\$ 7.15	\$ 5.81	\$ 6.00	7	\$ 8.00	\$ 6.00
1979	78,801	\$ 7.02	\$ 6.62	\$ 6.93	25	\$10.00	\$ 5.00
1980	123,304	\$ 4.52	\$ 5.40	\$ 5.83	31	\$ 8.42	\$ 3.25
1981	61,438	\$ 5.94	\$ 5.75	\$ 6.05	30	\$ 9.00	\$ 3.36
1982	21,960	\$ 8.46	\$ 8.35	\$ 8.69	5	\$10.14	\$ 8.17
1983	361,500	\$ 7.32	\$ 7.07	\$ 7.03	75	\$ 9.17	\$ 6.00
7-YR*	859,316	\$ 6.35	\$ 6.45	\$ 6.63	196	\$ 9.17	\$ 5.00

FEDERAL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977 1979 1983	530 70,064 7,700	\$ 6.00 \$18.58 \$ 6.30	\$ 6.00 \$14.81 \$ 6.01	\$ 6.00 \$ 9.43 \$ 6.01	1 3 2	\$ 6.00 \$32.06 \$ 6.79	\$ 6.00 \$ 2.93 \$ 6.79
7-YR*	53,749	\$ 8.71	\$ 6.96	\$ 6.40	6	\$ 9.43	\$ 5.23

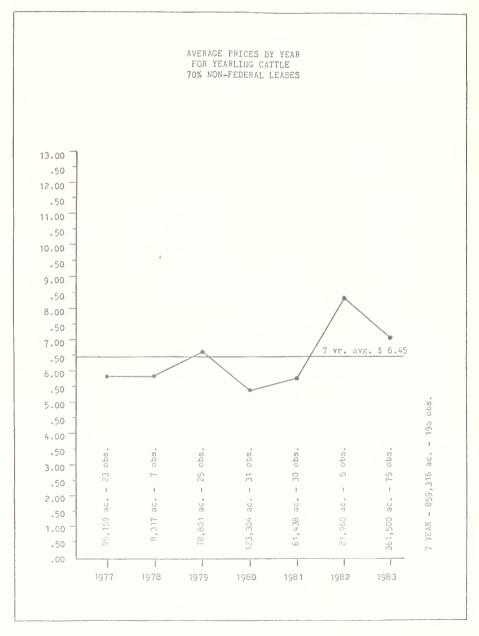
^{*} See Multi-Year Averages, Etc., Description in Glossary of Terms.

Table Y-2-2.

SUMMARY OF MULTI-YEAR AVERAGES

YEARLINGS 70% NONFEDERAL OWNERSHIP

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77–83 7 YR	\$ 6.45	859,316	196
78–83 6 YR	\$ 6.53	746,807	173
79–83 5 YR	\$ 6.57	740,244	166
80-83 4 YR	\$ 6.57	676,123	141
81-83 3 YR	\$ 6.88	532,866	110
82-83 2 YR	\$ 7.14	383,320	80
83 1 YR	\$ 7.07	361,500	75



Estimating the Private Land Lease Rate.

The prices paid for use by mature cattle and horses for the 280 transactions contained in the 100% file of nonfederal market transactions range from a low of \$0.67 to a high of \$48.00 per animal month, with a median of \$6.63.

The prices paid for use for the 196 transactions (1977-1983) contained in the 70% file range from a low of \$3.25 (1980) to a high of \$10.14 (1982) per head month. The average price for the total 7-year period, as shown by these transactions, was \$ 6.45 with a median price of \$6.63. The range of prices for the transactions considered in the 7-year average was from a low of \$5.00 and a high of \$9.17.

The averages for the 7-year period (77-83 - \$6.45), 6-year period (78-83 - \$6.53), 5-year period (79-83 - \$6.57), 4-year period (80-83 - \$6.57), 3-year period (81-83 - \$6.88), and 2-year period (82-83 - \$7.14) indicate a slow but steady increase in prices from 1977 through 1982. The 1983 price shows a very slight drop, \$0.07 from the 2-year average.

Although the data does not show any direct relationship between availability of forage to price, it is felt that placing more weight on the averages for multiple years should level out any possible highs and lows resulting from changes in availability, range conditions, and demand.

Placing more weight on the averages of the past four years, it is concluded that \$6.75 per head month would represent a reasonable estimate of the private land lease rate for yearling cattle in this pricing area.

Comparison with Public Rangelands

The private land lease rate was compared to the grazing use by yearling cattle on public rangelands for those factors which the market investigation indicates have a bearing on value or price. The effect of some of these factors was dealt with by selecting transaction data that involve only properties having the same or similar characteristics. These comparisons are summarized in the following chart. A zero indicates that a price adjustment between the private land lease rate and public rangeland grazing was not necessary because the factor was comparable for both land categories.

Comparison Chart

Time	Location	Size	Water		Conditions Of Use		Improvement Construction
0	0	0	0	0	~ 5%	0	0

The same narrative descriptions of the graphic comparisons or ratings given in Price Area 1 apply here.

The \$6.75 private land lease rate is adjusted downward by five percent. The result is \$6.41 ($$6.75 \times .95$). The fair market value of grazing use by yearling cattle on public rangelands within this pricing area is estimated to be \$6.40 per head month.

Table Y-2-3.

SUMMARY OF MULTI-YEAR AVERAGES

YEARLINGS 70% FEDERAL OWNERSHIP

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77-83 7 YR	\$ 6.96	53,749	6
78–83 6 YR	\$ 7.15	53,219	5
79–83 5 YR	\$ 7.15	53,219	5
80-83 4 YR	\$ 6.01	7,700	2
81-83 3 YR	\$ 6.01	7,700	2
82 – 83 2 YR	\$ 6.01	7,700	2
83 1 YR	\$ 6.01	7,700	2

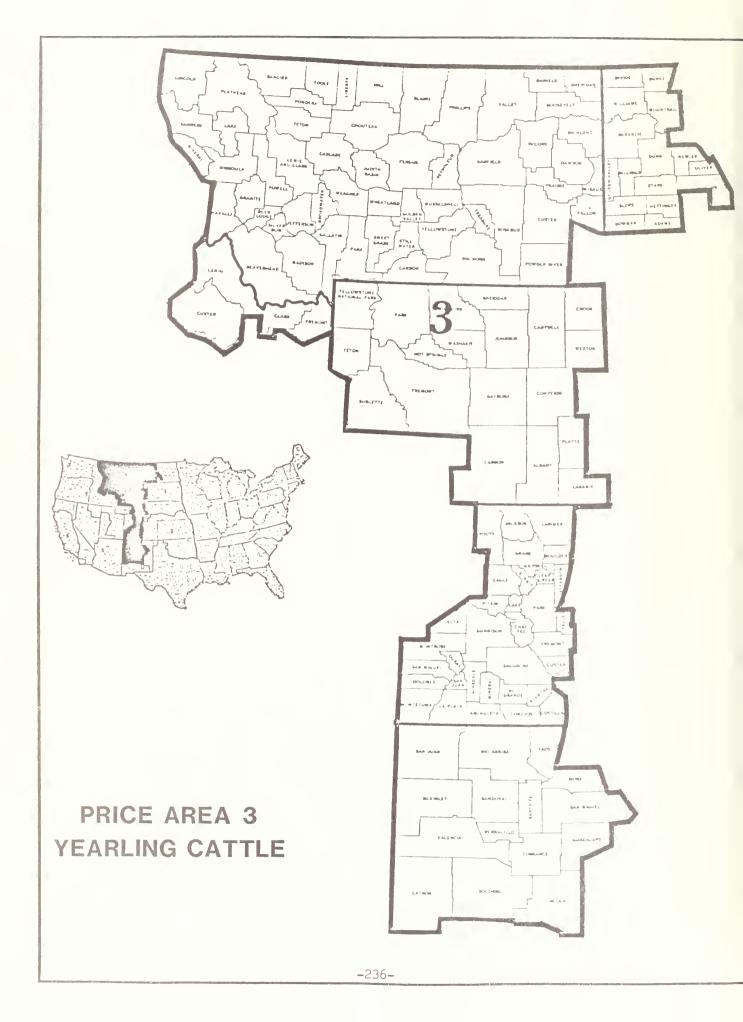
Table 3 shows that there was an extremely limited amount of yearling transaction data involving federal lands. The average prices paid for use on lands in federal ownership for the entire 7-year period was \$6.96 per head month. The 5-year (79-83) average was \$ 7.15. There were only two transactions in 1983 at \$6.01.

The \$6.40 value of grazing yearling cattle on public lands derived by adjusting the private lands lease rate of \$6.75 downward by five to reflect differences between the conditions on public rangelands is the \$0.56 below the 7-year average for federal lands, based on the limited amount of data available. It is felt that the adjustment is adequate to reflect any possible differences.

VALUATION

YEARLING CATTLE

PRICE AREA 3



Transaction Data Summaries

Table Y-3-1.

YEARLINGS SUBFILES: D, F-J - 70% TRANSACTIONS

ALL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977	117,164	\$ 5.93	\$ 5.26	\$ 5.00	24	\$ 8.00	\$ 3.51
1978	56, 266	\$ 6.15	\$ 5.44	\$ 5.00	9	\$ 8.00	\$ 4.37
1979	106,919	\$ 5.30	\$ 5.80	\$ 5.59	18	\$ 7.50	\$ 5.39
1980	202,814	\$ 6.77	\$ 6.11	\$ 6.50	23	\$ 8.00	\$ 5.00
1981	152,994	\$ 5.26	\$ 5.46	\$ 5.56	38	\$ 8.00	\$ 3.73
1982	52,256	\$ 4.91	\$ 5.40	\$ 5.36	39	\$ 7.50	\$ 4.76
1983	826,842	\$ 6.04	\$ 6.40	\$ 6.51	107	\$ 8.00	\$ 5.60
7 - YR*	1,529,323	\$ 5.82	\$ 5.94	\$ 6.00	258	\$ 8.00	\$ 5.00

NONFEDERAL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977	80,309	\$ 7.14	\$ 5.67	\$ 5.75	20	\$ 8.00	\$ 4.00
1978	40,266	\$ 6.81	\$ 5.28	\$ 5.00	7	\$ 7.12	\$ 5.00
1979 1980	58,699 12,885	\$ 5.53 \$ 5.77	\$ 5.84 \$ 5.49	\$ 5.59 \$ 6.00	16 17	\$ 7.50 \$ 8.00	\$ 5.43 \$ 2.86
1981	74,280	\$ 5.87	\$ 5.35	\$ 5.53	30	\$ 8.00	\$ 3.64
1982 1983	34,262 606,619	\$ 5.17 \$ 6.20	\$ 5.58 \$ 6.52	\$ 5.39 \$ 6.64	33 90	\$ 8.00 \$ 8.00	\$ 4.80
7–YR*	945,113	\$ 6.09	\$ 6.02	\$ 6.00	213	\$ 8.00	\$ 5.00

FEDERAL OWNERSHIP

							T 07.7
PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977	36,314	\$ 3.40	\$ 3.90	\$ 4.09	4	\$ 5.00	\$ 3.28
1978	16,000	\$ 4.50	\$ 6.00	\$ 6.00	2	\$ 8.00	\$ 4.00
1979	48,220	\$ 5.02	\$ 5.50	\$ 5.50	2	\$ 6.00	\$ 5.00
1980	152,604	\$ 7.06	\$ 7.10	\$ 7.30	6	\$ 8.00	\$ 7.00
1981	45,190	\$ 5.86	\$ 5.75	\$ 5.78	6	\$ 6.50	\$ 5.56
1982	9,738	\$ 4.66	\$ 4.64	\$ 4.45	6	\$ 6.00	\$ 3.89
1983	263,793	\$ 5.29	\$ 5.75	\$ 5.88	17	\$ 7.50	\$ 5.00
7-YR*	538,168	\$ 5.57	\$ 5.56	\$ 5.77	45	\$ 7.76	\$ 4.90

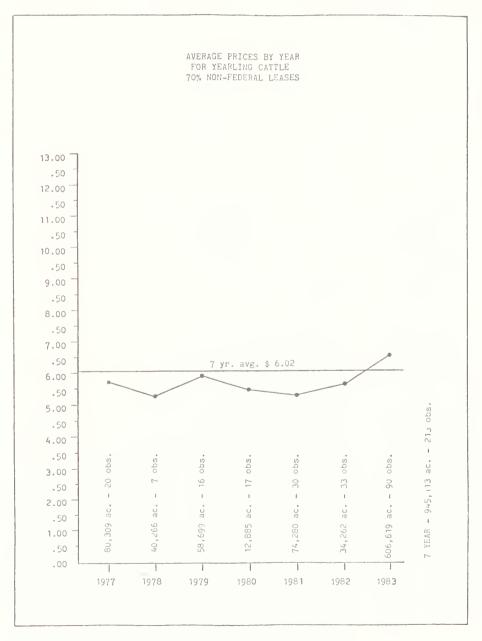
^{*} See Multi-Year Averages, Etc., Description in Glossary of Terms.

Table Y-3-2.

SUMMARY OF MULTI-YEAR AVERAGES

YEARLINGS 70% NONFEDERAL OWNERSHIP

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77-83 7 YR	\$ 6.02	945,113	213
78-83 6 YR	\$ 6.05	865,834	193
79–83 5 YR	\$ 6.05	825, 568	186
80-83 4 YR	\$ 6.10	768,039	170
81-83 3 YR	\$ 6.00	752,233	153
82-83 2 YR	\$ 6.30	639,061	123
83 1 YR	\$ 6.52	606,619	90



Estimating the Private Land Lease Rate.

The prices paid for use by yearlings for the 288 transactions contained in the 100% file of nonfederal market transactions range from a low of \$0.04 to a high of \$27.83 per animal month, with a median of \$6.00.

The prices paid for the 213 transactions (1977-1983) contained in the 70% file range from a low of \$2.86 (1980) to a high of \$8.00 (1977, 80,81,82,83) per head month. The average price for the total 7-year period, as shown by these transactions, was \$ 6.02 with a median price of \$6.00. The range of prices for the transactions considered in the 7-year average was from a low of \$5.00 and a high of \$8.00.

The averages for the 7-year period (77-83 - \$6.02), 6-year period (78-83 - \$6.05), 5-year period (79-83 - \$6.05), 4-year period (80-83 - \$6.10), 2-year (82-83 - \$6.30) period, and the 1983 price indicate a slow but steady increase in prices from 1977 through 1983. The 3-year average of 6.00 shows a slight drop in 1981

Portions of this area have gone through a drought and a subsequent increase in moisture over the past four or five years. Although the data does not show any direct relationship between availability of forage to price, it is felt that placing more weight on the averages for multiple years should level out any possible highs and lows resulting from changes in availability, range conditions, and demand.

Placing considerable weight on the 4-year average, and considering the information for the two most recent years, it is concluded that \$6.25 per head month would represent a reasonable estimate of the private land lease rate for yearling cattle in this pricing area.

Comparison with Public Rangelands

The private land lease rate was compared to the grazing use by yearling cattle on public rangelands for those factors which the market investigation indicates have a bearing on value or price. The effect of some of these factors was dealt with by selecting transaction data that involve only properties having the same or similar characteristics. These comparisons are summarized in the following chart. A zero indicates that a price adjustment between the private land lease rate and public rangeland grazing was not necessary because the factor was comparable for both land categories.

Comparison Chart

Time Location	Size	Water		Conditions Of Use	Improvement Maintenance	Improvement Construction
0 0	0	0	0	-5%	0	0

The same narrative descriptions of the graphic comparisons or ratings given in Price Area 1 apply here.

The \$6.25 private land lease rate is adjusted downward by five percent. The result is \$5.94 ($$6.25 \times .95$). The fair market value of grazing use by yearling cattle on public rangelands within Price Area 3 is estimated to be \$5.90 per head month.

Table Y-3-3.

SUMMARY OF MULTI-YEAR AVERAGES

YEARLINGS 70% FEDERAL OWNERSHIP

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77-83 7 YR	\$ 5.56	538,168	45
78–83 6 YR	\$ 5.76	531,656	41
79-83 5 YR	\$ 5.74	515,656	39
80-83 4 YR	\$ 5.76	496,106	39
81-83 3 YR	\$ 5.45	322,787	31
82-83 2 YR	\$ 5.36	279,604	25
83 1 YR	\$ 5.75	263,793	17

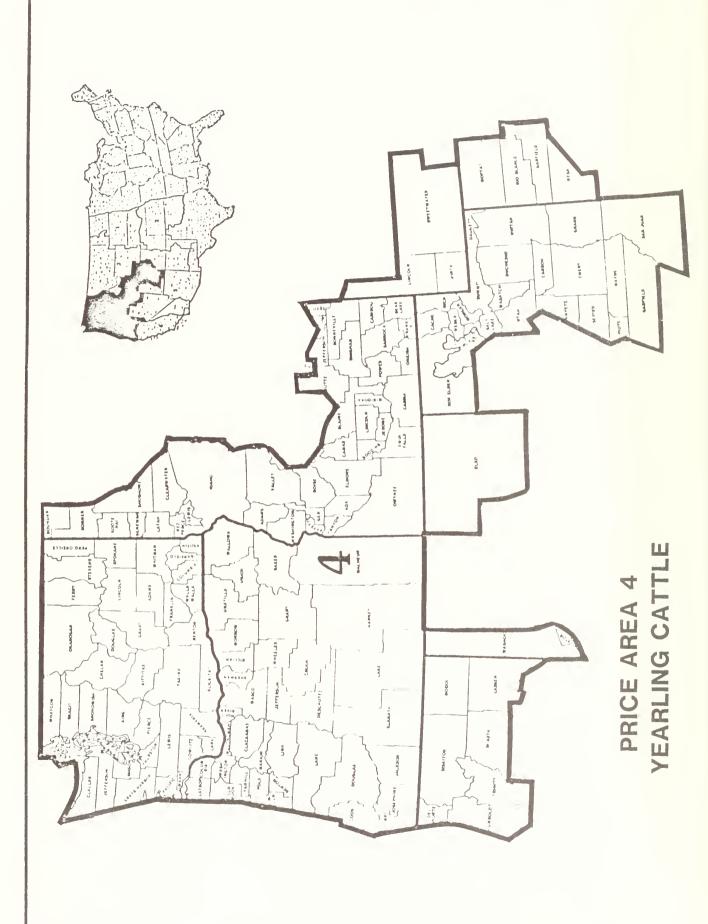
Table 3 shows that the average prices paid for use on lands in federal ownership for the entire 7-year period was \$5.56 per head month. The 4-year (79-83) average was \$5.76. The average price during 1983 was \$5.75.

The \$5.90 value of grazing yearling cattle on public lands derived by adjusting the private lands lease rate of \$6.25 downward by five percent to reflect differences between the conditions on public rangelands is 14 cents above the 4-year average for federal lands. It is felt that the adjustment is adequate to reflect any possible differences.

VALUATION

YEARLING CATTLE

PRICE AREA 4



Transaction Data Summaries

Table Y-4-1.

YEARLINGS SUBFILES: D, F-J - 70% TRANSACTIONS

ALL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977	11,140	\$ 4.30	\$ 5.17	\$ 5.00	17	\$ 7.73	\$ 4.00
1978	2,840	\$ 3.62	\$ 3.38	\$ 3.50	4	\$ 5.00	\$ 3.00
1979	3,632	\$ 6.14	\$ 6.38	\$ 6.34	6	\$ 8.00	\$ 5.40
1980	40,688	\$ 5.14	\$ 5.77	\$ 6.00	17	\$ 8.00	\$ 3.67
1981	91,815	\$ 4.60	\$ 5.49	\$ 5.81	20	\$ 8.00	\$ 4.05
1982	29,924	\$ 5.42	\$ 6.10	\$ 6.25	14	\$ 8.51	\$ 4.50
1983	230,759	\$ 5.49	\$ 5.73	\$ 5.50	81	\$ 8.00	\$ 4.50
7-YR*	407,334	\$ 5.24	\$ 5.69	\$ 5.71	157	\$ 8.00	\$ 4.20
11/	4011004	ψ 3.24	Ψ 0.00	ψ J. / T	101	Ψ 0.00	W 1020

NONFEDERAL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977	5,800	\$ 5.02	\$ 5.24	\$ 5.19	14	\$ 7.50	\$ 4.00
1978	2,840	\$ 3.62	\$ 3.38	\$ 3.50	4	\$ 5.00	\$ 3.00
1979	3,632	\$ 6.14	\$ 6.38	\$ 6.34	6	\$ 8.00	\$ 5.40
1980	22,652	\$ 5.26	\$ 6.00	\$ 7.00	15	\$ 8.00	\$ 4.00
1981	28, 285	\$ 5.69	\$ 5.60	\$ 6.00	17	\$ 8.00	\$ 3.75
1982	20,924	\$ 5.17	\$ 6.11	\$ 6.50	13	\$ 8.51	\$ 4.50
1983	69,390	\$ 5.68	\$ 5.71	\$ 6.00	71	\$ 8.00	\$ 4.39
7-YP.*	153,920	\$ 5.51	\$ 5.72	\$ 6.00	138	\$ 8.00	\$ 4.00

FEDERAL OWNERSHIP

				77.17		TITOIT	TOM
PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977	5,700	\$ 3.90	\$ 5.27	\$ 4.31	3	\$ 9.00	\$ 2.50
1980	18,036	\$ 4.99	\$ 4.04	\$ 4.04	2	\$ 5.00	\$ 3.08
1981	61,820	\$ 4.14	\$ 4.89	\$ 5.00	3	\$ 5.62	\$ 5.00
1982	9,000	\$ 6.00	\$ 6.00	\$ 6.00	1	\$ 6.00	\$ 6.00
1983	161,568	\$ 5.43	\$ 5.83	\$ 5.07	12	\$ 8.00	\$ 4.93
7-YR*	254,228	\$ 5.08	\$ 5.46	\$ 5.00	19	\$ 8.00	\$ 4.91

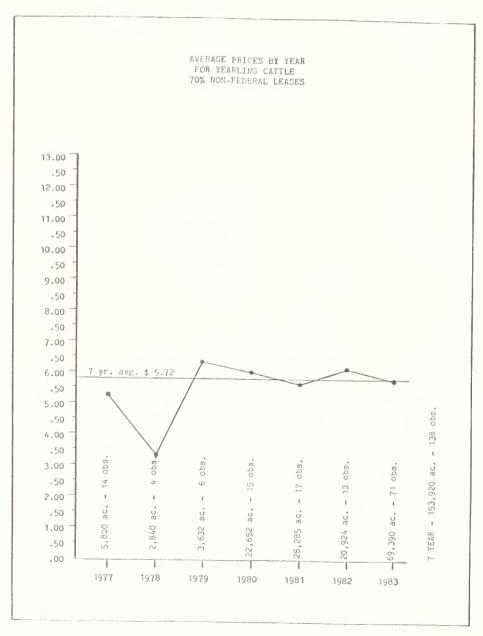
^{*} See Multi-Year Averages, Etc., Description in Glossary of Terms.

Table Y-4-2.

SUMMARY OF MULTI-YEAR AVERAGES

YEARLINGS 70% NONFEDERAL OWNERSHIP

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77–83 7 YR	\$ 5.72	153,920	138
78-83 6 YR	\$ 5.77	148,710	124
79–83 5 YR	\$ 5.84	137,790	120
80-83 4 YR	\$ 5.81	136,058	114
81-83 3 YR	\$ 5.76	118,009	101
82 – 83 2 YR	\$ 5.78	89,412	84
83 1 YR	\$ 5.71	69,390	71



Estimating the Private Land Lease Rate.

The prices paid for use by yearlings for the 198 transactions contained in the 100% file of nonfederal market transactions range from a low of \$0.08 to a high of \$27.50 per head month, with a median of \$6.00.

The prices paid for use for the 138 transactions (1977-1983) contained in the 70% file range from a low of \$3.00 (1978) to a high of \$8.51 (1982) per head month. The average price for the total 7-year period, as shown by these transactions, was \$ 5.72 with a median price of \$6.00. The range of prices for the transactions considered in the 7-year average was from \$4.00 to \$8.00.

The averages for the 7-year period (77-83 - \$5.72), 6-year period (78-83 - \$5.77), 5-year period (79-83 - \$5.84), 4-year period (80-83 - \$5.81) 3-year period (81-83 - \$5.76), 2-year (82-83 - \$5.78) period and the 1983 price show that the prices have remained fairly constant throughout the 7-year period coverd by the transaction data. The 3-year and 2-year averages and the 1983 prices do show a slight drop from the 5- and 4-year averages.

Portions of this area have gone through a drought and a subsequent increase in moisture over the past four or five years. Although the data does not show any direct relationship between availability of forage to price, it is felt that placing more weight on the averages for multiple years should level out any possible highs and lows resulting from changes in availability, range conditions, and demand.

Placing more weight on the averages of the past four years, and recognizing that prices have dropped slightly in most recent years, it is concluded that \$5.70 per head month would represent a reasonable estimate of the private land lease rate for yearling cattle in this pricing area.

Comparison with Public Rangelands

The private land lease rate was compared to the grazing use by yearling cattle on public rangelands for those factors which the market investigation indicates have a bearing on value or price. The effect of some of these factors was dealt with by selecting transaction data that involve only properties having the same or similar characteristics. These comparisons are summarized in the following chart. A zero indicates that a price adjustment between the private land lease rate and public rangeland grazing was not necessary because the factor was comparable for both land categories.

Comparison Chart

Time	Location	Size	Water		Conditions Of Use	Improvement Maintenance	Improvement Construction
0	0	0	0	0	~ 5%	0	0

The same narrative descriptions of the graphic comparisons or ratings given in Price Area 1 apply here.

The \$5.70 private land lease rate is adjusted downward by five percent. The result is \$5.42 ($\$5.70 \times .95$). The fair market value of grazing use by yearling cattle on public rangelands within Price Area 4 is estimated to be \$5.40 per head month.

Table Y-4-3.

SUMMARY OF MULTI-YEAR AVERAGES

YEARLINGS 70% FEDERAL OWNERSHIP

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77-83 7 YR	\$ 5.72	153,920	138
78–83 6 YR	\$ 5.77	148,710	124
79–83 5 YR	\$ 5.84	137,790	120
80-83 4 YR	\$ 5.81	136,058	114
81-83 3 YR	\$ 5.76	118,009	101
82 – 83 2 YR	\$ 5.78	89,412	84
83 1 YR	\$ 5.71	69,390	71

Table 3 shows that there was a limited amount of yearling transaction data involving federal lands. The average prices paid for use on lands in federal ownership for the entire 7-year period was \$5.72 per head month. The 4-year (80-83) average was \$5.81 and the 83 price was \$5.71.

The \$5.40 value of grazing yearling cattle on public lands derived by adjusting the private lands lease rate of \$5.70 downward by five to reflect differences between the conditions on public rangelands is the 41 cents below the 4-year average and 32 cents below the 7-year average for federal lands as shown by the limited amount of data available. It is felt that the adjustment is more than adequate to reflect any possible differences.

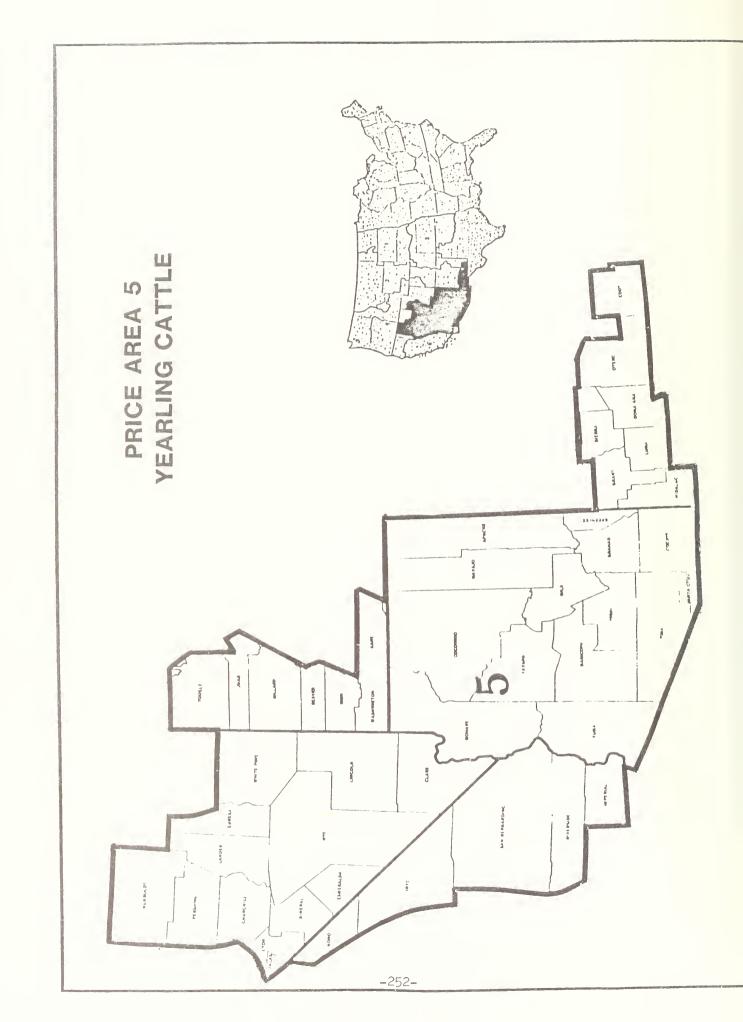
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VALUATION

YEARLING CATTLE

PRICE AREA 5



Transaction Data Summaries

Table Y-5-1.

ITAKLINGS SUBLITIES: D' L-0 - 108 IKANSACII	YEARLINGS	SUBFILES:	D,	F-J	_	70%	TRANSACTION
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ALL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977	6,440	\$ 4.88	\$ 4.63	\$ 4.13	6	\$ 7.00	\$ 3.00
1978	13,904	\$ 3.03	\$ 3.16	\$ 3.25	3	\$ 6.00	\$ 0.24
1979	7,107	\$ 6.52	\$ 5.42	\$ 5.00	5	\$ 8.00	\$ 4.65
1980	68,730	\$ 5.38	\$ 5.11	\$ 4.32	5	\$ 6.60	\$ 4.11
1981	102,334	\$ 4.02	\$ 5.36	\$ 5.40	6	\$ 6.50	\$ 5.40
1982	9,601	\$ 6.49	\$ 6.40	\$ 6.40	2	\$ 6.50	\$ 6.30
1983	215,806	\$ 4.90	\$ 5.17	\$ 5.00	20	\$ 7.33	\$ 4.40
7-YR*	466,477	\$ 4.89	\$ 5.10	\$ 5.00	47	\$ 7.00	\$ 3.90

NONFEDERAL OWNERSHIP

							1
PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977	6,440	\$ 4.88	\$ 4.63	\$ 4.13	6	\$ 7.00	\$ 3.00
1978	1,620	\$ 1.37	\$ 3.12	\$ 3.12	2	\$ 6.00	\$ 0.24
1979 1980	5,267 33,250	\$ 7.56 \$ 6.44	\$ 5.89 \$ 5.27	\$ 5.45 \$ 5.27	4 2	\$ 8.00 \$ 6.54	\$ 5.00 \$ 6.54
1981	98,976	\$ 3.25	\$ 5.46	\$ 5.70	6	\$ 7.00	\$ 5.40
1982 1983	9,601 40,744	\$ 6.49	\$ 6.40	\$ 6.40	2	\$ 6.50	\$ 6.30
1703	40,744	\$ 6.36	\$ 5.92	\$ 6.00	13	\$ 7.50	\$ 5.00
7-YR*	117,807	\$ 5.95	\$ 5.49	\$ 6.00	35	\$ 7.33	\$ 4.65

FEDERAL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1978 1979	12,284 1,840	\$ 3.25 \$ 3.55	\$ 3.25 \$ 3.55	\$ 3.25 \$ 3.55	1	\$ 3.25 \$ 3.55	\$ 3.25 \$ 3.55
1980 1981	69,480 97,524	\$ 5.69 \$ 3.92	\$ 5.14 \$ 4.44	\$ 4.32 \$ 4.44	3	\$ 7.00 \$ 5.00	\$ 4.11 \$ 3.87
1983	318,534	\$ 3.29	\$ 4.11	\$ 4.20	7	\$ 5.00	\$ 3.90
7-YR*	320,211	\$ 4.35	\$ 4.16	\$ 4.16	12	\$ 5.00	\$ 3.87

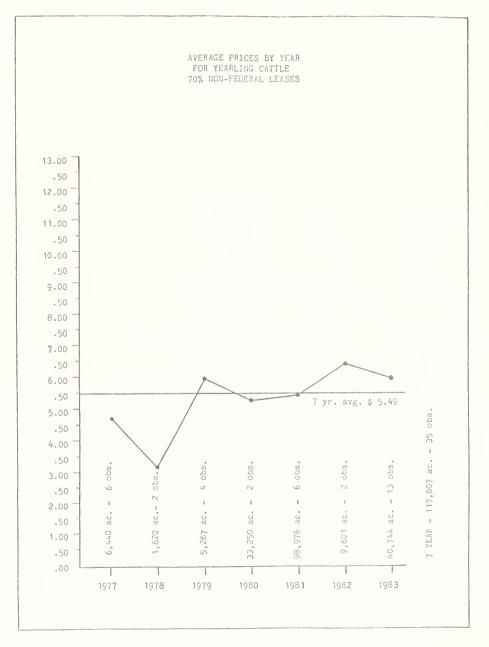
^{*} See Multi-Year Averages, Etc., Description in Glossary of Terms.

Table Y-5-2.

SUMMARY OF MULTI-YEAR AVERAGES

YEARLINGS 70% NONFEDERAL OWNERSHIP

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77-83 7 YR	\$ 5.49	117,807	35
78-83 6 YR	\$ 5.69	119,867	29
79-83 5 YR	\$ 5.78	109,092	27
80-83 4 YR	\$ 5.78	99,325	23
81-83 3 YR	\$ 5.87	71,075	21
82 - 83 2 YR	\$ 5.98	50,345	15
83 1 YR	\$ 5.92	40,744	13



Estimating the Private Land Lease Rate.

The prices paid for use by yearlings for the 49 transactions contained in the 100% file of nonfederal market transactions range from a low of \$0.04 to a high of \$12.50 per head month, with a median of \$6.00.

The prices paid for the 35 transactions (1977-1983) contained in the 70% file range from a low of \$0.24 (1978) to a high of \$8.00 (1979) per head month. The average price for the total 7-year period, as shown by these transactions, was \$5.49 with a median price of \$6.00. The range of prices for the transactions considered in the 7-year average was from a low of \$4.65 and a high of \$7.33.

There are only a total of 35 transactions pertaining to yearlings in this price area. The averages for the 7-year (77-83 - \$5.49), 6-year (78-83 - \$5.69), 5-year (79-83 - \$5.78), 4-year (80-83 - \$5.87), 3-year (81-83 - \$5.87) and 2-year (82-83 - \$5.98) periods and the 1983 - \$5.92 price indicate a slow but steady increase in prices from 1977 through 1983.

Leaning on the 4-year average to level out possible highs and lows, as has been done in other pricing areas, would indicate a price of about \$5.75 per head month for yearlings. But due to the small number of leases, the 7-year average of \$5.49 has been given more consideration in this analysis. The private land lease rate for mature cattle and horses for this area was estimated to be \$5.50. The mature cattle estimate was based on consideration of some 210 transactions. It would appear that lessees and lessors in this area are not differentiating between mature cattle and yearlings in arriving at the prices. It might have been more logical to have lumped the yearlings in with mature cattle for analysis. If this had been done, the prices

represented by the yearling transactions would have been offset by the greater number of mature cattle transactions. The end result would have been an indicated price at or near the \$5.50 estimate for mature cattle and horses. Therefore, it is concluded that \$5.50 per head month is a reasonable estimate for the yearlings in Price Area 5.

Comparison with Public Rangelands

The private land lease rate was compared to the grazing use by yearling cattle on public rangelands for those factors which the market investigation indicates have a bearing on value or price. The effect of some of these factors was dealt with by selecting transaction data that involve only properties having the same or similar characteristics. These comparisons are summarized in the following chart. A zero indicates that a price adjustment between the private land lease rate and public rangeland grazing was not necessary because the factor was comparable for both land categories.

Comparison Chart

Time	Location	Size	Water		Conditions Of Use	Improvement Maintenance	Improvement Construction
0	0	Ο	0	0	- 5%	0	0

The same narrative descriptions of the graphic comparisons or ratings given in Price Area 1 apply here.

The \$5.50 private land lease rate is adjusted downward by five percent. The result is \$5.23 ($$5.50 \times .95$). The fair market value of grazing use by yearling cattle on public rangelands within Price Area 5 is estimated to be \$5.20 per head month.

Comparison of Adjusted Price to Prices Involving Federal Lands

Table Y-5-3.

SUMMARY OF MULTI-YEAR AVERAGES

YEARLINGS 70% FEDERAL OWNERSHIP

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77–83 7 YR	\$ 4.16	320,211	12
78-83 6 YR	\$ 4.16	320,211	12
79–83 5 YR	\$ 4.24	307,927	11
80-83 4 YR	\$ 4.26	551,677	12
81-83 3 YR	\$ 4.18	515,138	9
82-83 2 YR	\$ 4.11	318,534	7
83 1 YR	\$ 4.11	318,534	7

Table 3 shows the prices for a total of 12 leases involving federal lands in this pricing area. The average prices paid for these transactions for the entire 7-year period was \$4.16 per head month. The 4-year (79-83) average was \$4.26. The average price during 1983 was \$4.11.

The \$5.20 value of grazing yearling cattle on public lands, derived by adjusting the private lands lease rate of \$5.50 downward by five percent to reflect differences between the conditions on public rangelands, is well below the 7-year and 4-year average for yearlings on federal lands. However, the same rationale described in arriving at the private land lease rate above would apply here. The 4-year average for mature cattle on federal lands was \$5.07 and the 1983 price was \$5.20, the same as the adjusted rate for yearlings. Therefore, it is concluded that the overall prices paid for cattle and yearlings on federal land in this area supports the adjusted value for yearlings.

VALUATION

YEARLING CATTLE

PRICE AREA 6



PRICE AREA 6 YEARLING CATTLE

Transaction Data Summaries

Table Y-6-1.

YEARLINGS SUBFILES: D, F-J - 70% TRANSACTIONS

ALL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977	105,360	\$ 3.88	\$ 3.06	\$ 2.84	63	\$ 5.12	\$ 2.13
1978	5,418	\$ 3.43	\$ 2.28	\$ 1.81	9	\$ 6.00	\$ 1.12
1979	66,356	\$ 3.74	\$ 3.73	\$ 3.29	15	\$ 7.35	\$ 2.55
1980	23,319	\$ 4.98	\$ 3.88	\$ 4.50	19	\$ 6.84	\$ 2.13
1981	27,927	\$ 5.40	\$ 5.61	\$ 5.40	13	\$10.00	\$ 4.00
1982	3,000	\$ 1.92	\$ 1.92	\$ 1.92	1	\$ 1.92	\$ 1.92
1983	93,773	\$ 5.06	\$ 4.86	\$ 5.00	44	\$ 7.07	\$ 3.71
7-YR*	364,932	\$ 4.35	\$ 3.84	\$ 3.72	164	\$ 6.92	\$ 2.55

NONFEDERAL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977	105,360	\$ 3.88	\$ 3.06	\$ 2.84	63	\$ 5.12	\$ 2.13
1978	5,418	\$ 3.43	\$ 2.28	\$ 1.81	9	\$ 6.00	\$ 1.12
1979	15,356	\$ 5.26	\$ 3.77	\$ 3.29	14	\$ 7.35	\$ 2.55
1980	23,319	\$ 4.98	\$ 3.88	\$ 4.50	19	\$ 6.84	\$ 2.13
1981	13,427	\$ 5.40	\$ 5.63	\$ 5.44	12	\$10.00	\$ 4.00
1982	3,000	\$ 1.92	\$ 1.92	\$ 1.92	1	\$ 1.92	\$ 1.92
1983	88,893	\$ 5.12	\$ 4.92	\$ 5.00	42	\$ 7.50	\$ 3.60
7-YR*	288,979	\$ 4.53	\$ 3.84	\$ 3.66	160	\$ 7.00	\$ 2.55

FEDERAL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1979 1981 1983	51,000 14,500 5,300	\$ 3.29 \$ 5.40 \$ 4.28	\$ 3.29 \$ 5.40 \$ 4.37	\$ 3.29 \$ 5.40 \$ 4.37	1 1 2	\$ 3.29 \$ 5.40 \$ 5.00	\$ 3.29 \$ 5.40 \$ 5.00
7YR*	70,800	\$ 3.79	\$ 4.36	\$ 4.37	4	\$ 5.40	\$ 3.73

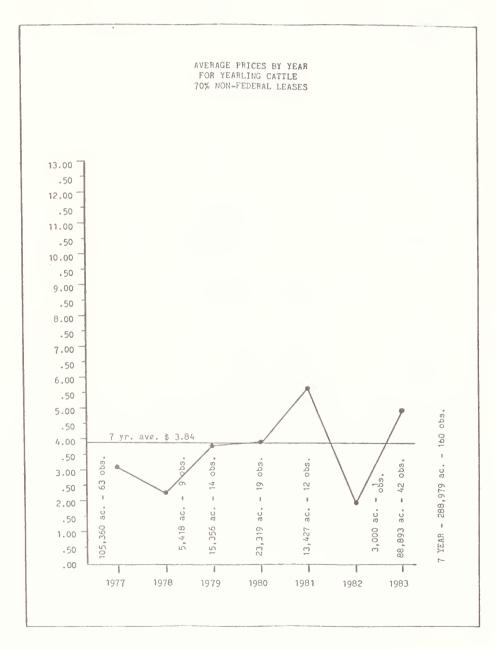
^{*} See Multi-Year Averages, Etc., Description in Glossary of Terms.

Table Y-6-2.

SUMMARY OF MULTI-YEAR AVERAGES

YEARLINGS 70% NONFEDERAL OWNERSHIP

MINE CONNI	ALTERACE DRIVE	* CDPC	T DO COC
TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77-83 7 YR	\$ 3.84	288,979	160
78-83 6 YR	\$ 4.39	165,695	97
79–83 5 YR	\$ 4.56	159,322	88
80 – 83 4 YR	\$ 4.71	143,271	74
81 - 83 3 YR	\$ 4.97	106,777	55
82 - 83 2 YR	\$ 4.86	98,883	43
83 1 YR	\$ 4.92	88,893	42



Estimating the Private Land Lease Rate

The prices paid for use by yearlings for the 228 transactions contained in the 100% file of nonfederal market transactions range from a low of \$0.44 to a high of \$17.50 per head month, with a median of \$3.66.

The prices paid for use for the 160 transactions (1977-1983) contained in the 70% file range from a low of \$1.12 (1978) to a high of \$10.00 (1981) per head month. The average price for the total 7-year period, as shown by these transactions, was \$ 3.84 with a median price of \$3.66. The range of prices for the transactions considered in the 7-year average was from a low of \$2.55 and a high of \$7.00.

The averages for the 7-year period (77-83 - \$3.84), 6-year period (78-83 - \$4.39), 5-year period (79-83 - \$4.56), 4-year period (80-83 - \$4.71), and 3-year period (81-83 - \$4.97) show a steady increase in prices from 1977 through 1981. The 2-year (82-83 - \$4.86) and the 1983 price (\$4.92) indicate prices have leveled off and dropped very slightly in the past two years.

Although the data does not show any direct relationship between availability of forage to price, it is felt that placing more weight on the averages for multiple years should level out any possible highs and lows resulting from changes in availability, range conditions, and demand.

Placing more weight on the averages of the past four years, and recognizing that prices have dropped slightly in the most recent years, it is concluded that \$4.75 per head month would represent a reasonable estimate of the private land lease rate for yearling cattle in this priving area.

Comparison with Public Rangelands

The private land lease rate was compared to the grazing use by yearling cattle on public rangelands for those factors which the market investigation indicates have a bearing on value or price. The effect of some of these factors was dealt with by selecting transaction data that involve only properties having the same or similar characteristics. These comparisons are summarized in the following chart. A zero indicates that a price adjustment between the private land lease rate and public rangeland grazing was not necessary because the factor was comparable for both land categories.

Comparison Chart

Time	Location	Size	Water		Conditions Of Use	Improvement Maintenance	Improvement Construction
0	0	0	0	. O	-5%	0	0

The same narrative descriptions of the graphic comparisons or ratings given in Price Area 1 apply here.

The \$4.75 private land lease rate is adjusted downward by five percent. The result is \$4.51 ($$4.75 \times .95$). The fair market value of grazing use by yearling cattle on public rangelands within Price Area 6 is estimated to be \$4.50 per head month.

Table Y-6-3.

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77-83 7 YR	\$ 4.36	70,800	4
78-83 6 YR	\$ 4.36	70,800	4
79–83 5 YR	\$ 4.36	70,800	4
80-83 4 YR	\$ 4.71	19,800	3
81-83 3 YR	\$ 4.71	19,800	3
82-83 2 YR	\$ 4.37	5,300	2
83 1 YR	\$ 4.37	5,300	2

The 70% file contains only four transactions for use by yearlings on federal lands in the price area. Table 3 shows the average prices paid for use on lands in federal ownership for the entire 7-year period was \$4.36 per head month. The 4-year (79-83) average was \$4.71. The average price during 1983 was \$4.37.

The \$4.50 value of grazing yearling cattle on public lands, derived by adjusting the private lands lease rate of \$4.75 downward by five percent to reflect differences between the conditions on public rangelands, is 21 cents below the 4-year average and 13 cents above the 1983 prices. It is felt that the limited amount of data does tend to support the value derived by adjusting the private land lease rate, indicating that the adjustments are adequate to recognize any differences.

VALUATION FOR SHEEP

General

The data describing the public rangelands and the grazing use on the public rangelands for the sheep price area are summarized in a series of charts in the valuation section which follows.

The transaction data were analyzed and processed to provide indications of the value of grazing (i.e., the private grazing land lease rate) for sheep for the price area. The methods used to process the data were described in the section entitled, "General Description of Transaction Data Analysis." The private grazing land lease rates are further analyzed to derive a final estimate of rental value for sheep for the price area. Public rangeland grazing use is then compared to the private land lease rate to develop the estimate of value for grazing sheep on the public rangelands.

These analyses are based on average prices for different segments of the 7-year period covered by the transaction data. A chart contained in the valuation section for each price area displays the average prices for the entire 7-year period, average for the 6-year period covering 1978 through 1983, 5-year period 1979 - 1983, 4-year period 1980-1983, 3-year period 1981-1983, 2-year period 1982-1983, and the average price for the most recent year, 1983.

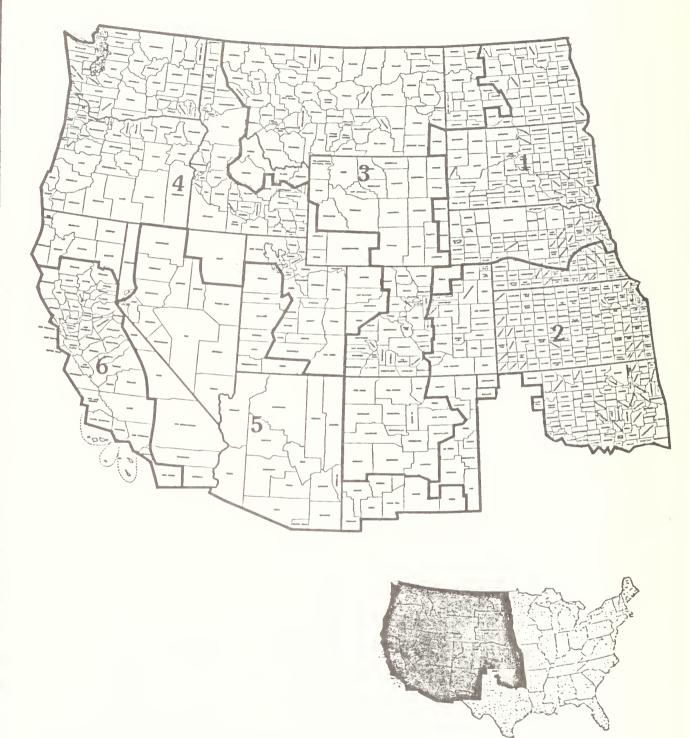
The estimates of the private land lease rate for each price area are based on analyses of transactions involving nonfederal lands.

The estimates of fair market rental value of grazing on public rangelands is then derived by adjusting the private land lease rates to reflect differences between the use on the nonfederal lands versus that on the public rangelands. Adjusting private land lease rates is similar to the inclusion of the non-fee costs that are currently included in the PRIA base value. The transaction data for leases involving federal lands are used as a check against the final estimate of value of grazing use on the public rangelands derived by adjusting the estimate of private land lease rate.

VALUATION

SHEEP

WESTWIDE PRICE AREA



PRICE AREA - SHEEP

Sheep Price Area

Physical Description

The price area for sheep includes all of the public rangelands in the 17 western states. The area is a composite of all of the six pricing areas described under the valuation for mature cattle and horses.

Public Rangeland Data

The data regarding the public rangelands within this price area and the grazing use on these lands is summarized in Tables S-1, S-2, and S-3 contained in the following three pages.

Table S-1.

	ADMIN BY			
	BLM	NF	NGL	TOTALS
GROSS ACRES	174,117,029	129,521,890	3,784,804	307,423,723
ACRES IN ALLOTS	155,757,348	89,144,903	3,696,991	248, 599, 242
# OF CATTLE ALLOTS	16,470	5, 434	1,711	23,615
# OF SHEEP ALLOTS	1,246	1,495	17	2,758
# OF HORSE ALLOTS	172	156	6	335
# OF MIXED ALLOTS	3,292	182	104	3,578
TOTAL ALLOTMENTS	21,180	7,268	1,838	30,286
# OF PERMITS	21,117	10,091	1,058	32,266
# OF OPERATORS	21,555	9,969	2,108	33,632
ACT CATT AUMs/AMs	11,297,905	5,395,490	1,124,944	17,818,339
ACT SHEEP AUMS/AMS	2,123,012	2,650,977	144,168	4,918,157
ACT HORSE AUMs/AMs	59,140	12,920	5,621	77,681
ACT OTHER AUMS/AMS	2,201	43,721	3,511	49,433
TOTAL AUMs/AMs	13,482,258	8,103,108	1,278,244	22,863,610
LARGEST PERMIT	107,227 AUMs	34,722 AMs	13,419 AMs	NA
SMALLEST PERMIT	l AUMs	l AM	l AM	
RGE (SIZE (60%)	1-10,000AUM	1-7,924 AMs	18-2262 AMs	
BEST STK RATE	1 Ac/AUM	1 Ac/AUM	l Ac/AUM	
WORST STK RATE	99 Ac/AUM	99 Ac/AUM	99 Ac/AUM	
60% RANGE STK RATE	1-99 Ac/AUM	1-99 Ac/AUM	1-15 Ac/AUM	
AVERAGE STK RATE	11.5 Ac/AUM	16.0 Ac/AUM	2.9 Ac/AUM	10.9 Ac/AUM

Table S-2.

Public Rangeland Tracts or Allotments

By Size and Administrative Category

SIZE CLASS	BLM	TRACTS O NF Numbe	R ALLOTMENTS NGL r	TOTAL	%
0-160	4,293	274	229	4,796	15.8%
161-640	4,732	361	438	5,531	18.3%
641-2,000	4,431	704	621	5,756	19.0%
2,001-10,000	4,888	3,093	499	8,480	28.0%
10,001-100,000	2,581	2,801	51	5,433	17.9%
100,001-500,000	233	33	0	266	0.9%
500,001-1,000,000	19	2	0	21	.1%
Over 1,000,000	3	0	0	3	
TOTALS	21,180	7,268	1,838	30,286	100.0%

Number of Public Rangeland Operators

In Different Size Classes, By Administrative Category

SIZE CLASS AUMs(BLM)	NUMBER	NUMBER OF OPERATORS IN SIZE CLASSES*				
 AMs (FS)	BLM	NF	NGL	TOTALS	OPERATORS	
0**	624	130	2	756	2.4%	
1-100	8,942	244	270	9,456	29.6%	
101-500	7,562	3,782	558	11,902	37.2%	
501-1,000	2,098	1,542	294	3,934	10.6%	
1,001-2,000	1,577	947	177	2,701	8.4%	
2,001-3,000	603	391	99	1,093	3.4%	
3,001-4,000	298	223	328	524	1.6%	
4,001-5,000	170	149	9	328	1.0%	
5,001-15,000	357	174	76	607	1.9%	
15,001-25,000	39	20	395	454	1.4%	
25,000 PLUS	23	8	186	217	0.7%	
TOTALS	22,293	7,610	2,069	31,972***	100.0%	

^{*} A permit may be issued to a single operator or to a grazing association with several member operators.

^{**} Operators having ephemeral permits and trailing permits.

^{***} Another counting of operators within the price area is given as 33,632.

The summaries contained in Tables S-1, S-2, and S-3 show that the public rangelands within this price area consist of some 30,286 tracts or allotments ranging in size from less than 160 acres to over 1,000,000 acres. Thirty-four percent (10,327) of the tracts are 640 acres or less in size. Forty-seven percent (14,236) of the tracts are between 641 and 10,000 acres in size. Nineteen (5699) of the tracts are between 10,000 and 500,000 acres. The remaining (24) tracts are larger than 10,000 acres.

The grazing use by individual permittees ranges from a low of 1 AUMs to a high of 999,661 animal months. Thirty-two percent (10,212) of the operators have 100 AUMs/AMs or less of use. Approximately 58 percent (18,537) operators have between 101 and 2000 AUMs/AMs. The use by the remaining 10 percent (3,223) operators ranges from 2,001 AUMs/AMs to over 25,000 AUMs/AMs.

The stocking rates on these lands range from a high of 1 acre/AUM to a low of more than 99 acres/AUM. The overall average stocking rate for all of the public rangelands within this price area is approximately 4.36 acres/AUM.

Most of the tracts have public access and on-site sources of stock water.

Access to other tracts is controlled by the adjoining landowners. Stock water

for some of the tracts is provided by sources on adjoining lands, usually

owned or controlled by the public rangeland permittees/lessees.

Table S-4.

SHEEP SUBFILES: D, F-J - 70% TRANSACTIONS

ALL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1077	224 210	h 0 07	4 0 0F	h 0 00	115	4 2 00	d 0 43
1977 1978	334,319 94,217	\$ 0.97 \$ 1.11	\$ 0.85 \$ 1.36	\$ 0.80 \$ 1.20	115 21	\$ 2.00 \$ 2.70	\$ 0.43 \$ 0.75
1979	140,222	\$ 1.16	\$ 1.21	\$ 1.20	35	\$ 2.16	\$ 0.73
1980	307,773	\$ 0.82	\$ 0.85	\$ 0.80	67	\$ 1.80	\$ 0.55
1981	389,972	\$ 0.91	\$ 1.00	\$ 0.98	44	\$ 1.60	\$ 0.68
1982 1983	65,572 1,145,764	\$ 1.13 \$ 1.12	\$ 1.13 \$ 1.21	\$ 1.19 \$ 1.20	18 142	\$ 2.19 \$ 1.80	\$ 0.60
1903	1,145,704	Φ 1.1Z	Φ 1.21	Φ 1.20	142	\$ 1.00	\$ 0.90
7-YR*	2,556,952	\$ 1.00	\$ 1.04		440	\$ 2.02	\$ 0.64

NONFEDERAL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
							
1977	258,948	\$ 0.98	\$ 0.84	\$ 0.80	107	\$ 2.00	\$ 0.43
1978	31,688	\$ 1.17	\$ 1.15	\$ 0.90	15	\$ 2.08	\$ 0.75
1979	72,802	\$ 1.14	\$ 1.14	\$ 1.00	27	\$ 3.47	\$ 0.72
1980	216,670	\$ 0.85	\$ 0.88	\$ 0.83	60	\$ 2.00	\$ 0.55
1981	86,131	\$ 1.10	\$ 1.13	\$ 1.05	31	\$ 2.00	\$ 0.90
1982	49,552	\$ 0.97	\$ 0.90	\$ 0.90	15	\$ 1.50	\$ 0.43
1983	571,532	\$ 1.14	\$ 1.26	\$ 1.20	110	\$ 2.00	\$ 0.90
7-YR*	1,350,103	\$ 1.02	\$ 1.04		365	\$ 2.03	\$ 0.62

FEDERAL OWNERSHIP

PRICE DATE	ACRES	WGT AVG PR	AVG PRICE	MEDIAN	LEASES	HIGH	LOW
1977	60,011	\$ 1.03	\$ 1.01	\$ 0.96	6	\$ 1.80	\$ 0.86
1978	84,426	\$ 2.28	\$ 2.44	\$ 1.92	6	\$ 4.72	\$ 1.34
1979	44,077	\$ 1.33	\$ 1.50	\$ 1.60	8	\$ 2.02	\$ 1.24
1980	84,776	\$ 0.78	\$ 0.67	\$ 0.64	7	\$ 1.00	\$ 0.50
1981	228,849	\$ 0.73	\$ 0.76	\$ 0.68	13	\$ 1.21	\$ 0.66
1982	302,441	\$ 2.76	\$ 2.79	\$ 2.82	3	\$ 2.97	\$ 2.82
1983	583,420	\$ 1.09	\$ 1.01	\$ 1.02	32	\$ 1.68	\$ 0.69
7-YR*	1,172,817	\$ 1.02	\$ 1.05		77	\$ 2.02	\$ 0.67

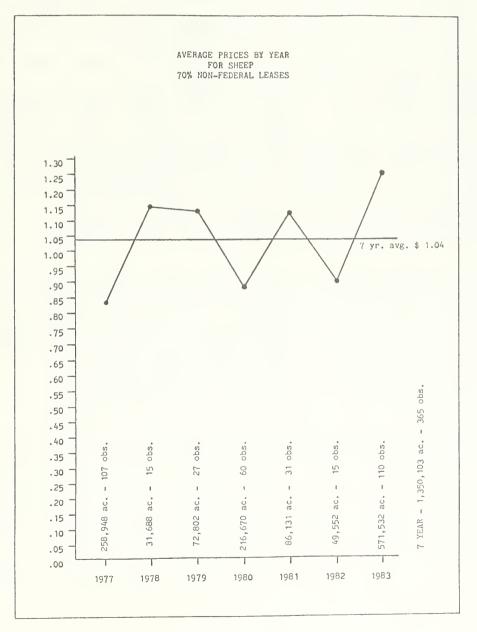
^{*} See Multi-Year Averages, Etc., Description in Glossary of Terms.

Table S-5.

SUMMARY OF MULTI-YEAR AVERAGES

SHEEP 70% NONFEDERAL OWNERSHIP

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77 – 83 7 YR	\$ 1.04	1,350,103	365
78-83 6 YR	\$ 1.12	1,083,492	258
79-83 5 YR	\$ 1.12	1,056,544	243
80-83 4 YR	\$ 1.12	964,442	216
81-83 3 YR	\$ 1.21	703,486	156
82-83 2 YR	\$ 1.23	616,075	123
83 1 YR	\$ 1.26	571,532	110



Estimating the Private Land Lease Rate.

The prices paid for use by sheep for the 521 transactions contained in the 100% file of nonfederal market transactions range from a low of \$0.02 to a high of \$20.62 per head or pair month.

The prices paid for use for the 365 transactions (1977-1983) contained in the 70% file range from a low of \$0.43 (1977, 82) to a high of \$3.47 (1979) per head or pair month. The average price for the total 7-year period, as shown by these transactions, was \$ 1.04. The range of prices for the transactions considered in the 7-year average was from a low of \$0.62 and a high of \$2.03.

The averages for the 6-year period (78-83 - \$1.12), 5-year period (79-83 - \$1.12), 4-year period (80-83 - \$1.12), 3-year period (81-83 - \$1.21), 2-year period (82-83 - \$1.23) and the 1983 price (\$1.26) indicate a slow but steady increase in prices from 1977 through 1983.

Although the data does not show any direct relationship between availability of forage and and demand to price, it is felt that the prices shown by the 4-year average (80-83) tend to level out any possible highs and lows resulting from changes in availability, range conditions, and demand.

Placing the most weight on the 4-year average price of \$1.12, which is the same as the averages for the 5-year and 6-year periods, it is concluded that \$1.10 per head or pair month would represent a reasonable estimate of the private lands lease rate for this price area for sheep.

Comparison with Public Rangelands

The private land lease rate was compared to the grazing use by sheep on public rangelands for those factors which the market investigation indicates have a bearing on value or price. The effect of some of these factors was dealt with by selecting transaction data that involve only properties having the same or similar characteristics. These comparisons are summarized in the following chart. A zero indicates that a price adjustment between the private land lease rate and public rangeland grazing was not necessary because the factor was comparable for both land categories.

Comparison Chart

						Improvement	dia .
Time	Location	Size	Water	Type	Of Use	Maintenance	Construction
0	0	0	0	0	- 5%	0	0

- Time The private land lease rate was estimated as of the date of this appraisal.
- Location The private land lease rate was based on transactions within the same price area as the public rangelands to which the rate applies.
- Size The public rangelands are an aggregation of tracts or allotments that are in the same general size range as the properties involved by the transactions in the price area.
- Animal Type The transactions considered in arriving at the private land lease rate for sheep were limited to those involving sheep.
- Conditions The conditions of use on public lands as compared to those of Use found on the private lands was analyzed in the section entitled, "Comparison of Private Leases to Public Permit," in an earlier section of this report. This analysis indicated the need to make a downward adjustment of five percent to reflect the differences in conditions of use.
- Improvement The comparison is based on the condition that the landowner in the private sector and for the public rangelands provides the materials and the lessee or permittee/lessee performs the work.
- Improvement The comparison is based on the condition that the landowner Construction does all range improvement construction.

The \$1.10 private land lease rate is adjusted downward by five percent. The result is \$1.05 ($\$1.10 \times .95$). The fair market value of grazing use by sheep on public rangelands is estimated to be \$1.05 per head or pair/month.

Comparison of Adjusted Price to Prices Involving Federal Lands Table S-6.

SUMMARY OF MULTI-YEAR AVERAGES

SHEEP 70% FEDERAL OWNERSHIP

TIME SPAN	AVERAGE PRICE	ACRES	LEASES
77-83 7 YR	\$ 1.05	1,172,817	77
78-83 6 YR	\$ 1.05	1,103,246	69
79–83 5 YR	\$ 1.01	1,039,551	63
80-83 4 YR	\$ 0.94	975,202	55
81-83 3 YR	\$ 0.98	888,789	48
82 – 83 2 YR	\$ 1.10	581,710	35
83 1 YR	\$ 1.01	583,420	32

Table S-6 shows a limited number (77) of transactions involving sheep on federal lands. Forty-eight of these took place in the past three years. The 3-year average price was \$0.98, 2-year price \$1.10, and the 1983 price was \$1.01. Thirty-two of the transactions took place in 1983. The 7-year average at \$1.05, 2-year average of \$1.10, and 1983 average at \$1.01 supports the adjusted price of \$1.05.

CERTIFICATION

The appraisers certify that they have no personal interest in grazing use on public rangelands, present or contemplated. They have personally inspected the property to the extent described in the section of the report entitled, "Scope of Investigation." According to their best knowledge, everything contained in the appraisal report is based on the facts as presented to them, and no important facts have been withheld.

The appraisal has been made in accordance with recognized appraisal standards and practices.

The fair market rental value of grazing on public rangelands is estimated as summarized in the Summary of Salient Facts and Conclusions on pages 13 and 14 of this report as of October 1, 1983.

Paul B. Tittman

Co-Leader-Appraiser

U. S. Forest Service

Clifton E. Brownell

Co-Leader-Appraiser

Bureau of Land Management



Copies of the appraisal report, computer tapes and or microfiche containing raw grazing rental transaction data may be obtained from:

National Technical Information Service U.S. Department of Commmerce 5285 Port Royal Road Springfield VA 22161

Appraisal Report:	Accession No	Price
Computer Tape:	Accession No	Price
Microfiche:	Accession No.	Price

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